

**ARMY CORPS OF ENGINEERS:
MEETING THE NATION'S WATER RESOURCE
NEEDS IN THE 21ST CENTURY**

HEARING
BEFORE THE
SUBCOMMITTEE ON
TRANSPORTATION AND INFRASTRUCTURE
OF THE
COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
ONE HUNDRED EIGHTH CONGRESS
SECOND SESSION

MARCH 31, 2004

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SECOND SESSION

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ARMY CORPS OF ENGINEERS: MEETING THE NATION'S WATER RESOURCE NEEDS IN THE 21ST CENTURY

WEDNESDAY, MARCH 31, 2004

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to notice, at 1:30 p.m. in room 406, Senate Dirksen Building, the Hon. Christopher S. Bond (chairman of the subcommittee) presiding.

Present: Senators Bond, Cornyn, Chafee, Graham, Allard, Clinton, Reid, Wyden, Warner, Jeffords [ex officio] and Inhofe [ex officio].

OPENING STATEMENT OF HON. CHRISTOPHER S. BOND, U.S. SENATOR FROM THE STATE OF MISSOURI

Senator BOND. Good afternoon. The committee will come to order.

When I came in this afternoon, I saw that we have managed to move traffic jams from the roads to the entrance to the building. I hope we have not cut too many of our witnesses or interested parties out.

We will have a very large number of witnesses today. I assure you that all of your written statements will be included in the record. They are very important for us and for our staffs as we develop this legislation which is extremely important. We would ask, in the interest of completing it before nightfall, that you confine your oral testimony to 4 minutes. There will be some time to ask questions and have a discussion, and try to get all of this testimony in today. I think it is extremely important because we will be considering the role of the U.S. Army Corps of Engineers in meeting the Nation's water resources and needs in the 21st Century. Again, I express my appreciation to all of the witnesses to come to testify.

As those of you who are interested in this area know too well, we have not had a water bill in 4 years. Despite distant editorial opinion, some of it right here in this city to the contrary, citizens, communities, States, and certainly the members of the Senate see the value of what the Corps can do when they are allowed to do their job to provide safety, environmental protection, and economic opportunity for our Nation.

As I have said before, every year there is a referendum on the Corps and what it does. We see those in the requests to the Water

and Energy Appropriations staff here. Members from north, south, east, and west, Democrats and Republicans, request that the Corps provide assistance to real life taxpayers doing important things for our economy and our families out in the working world.

As with other missions that are widely supported, the demand for services exceeds the supply of money, particularly with the OMB recommendations under which we suffer these days.

Senators in this bill have requested projects which total more than a great deal, most of it for ecosystem restoration. It is clear that while I am adamant that we will have a balanced and forward-looking bill to present to the subcommittee and to the full committee, we are going to put some of these requests on a stringent diet.

In the Midwest, an essential item for WRDA 2004, which is long overdue, must be authorization of new locks to replace the aging infrastructure on the Upper Mississippi River and Illinois waterway, and the feasibility study of navigation and environmental improvements, the 6-year study has been ongoing since 1993, if anybody wants to do the math on that.

It has cost us over \$70 million. We have not built anything.

We have studied for \$70 million and going on 11 years.

At the same time, competing countries like Brazil, investing to build and build while we study and study and study. The construction time for this bipartisan effort to modernize locks is about 15 years under the most optimistic forecast. That means we are already behind the curb and we are at great risk of having a grid-locked navigation system before we get these projects in place.

I was at a very informative hearing on the USDA last week which said that transportation is often lost, and the determinate between markets won and markets lost directly impacts our ability to compete and prosper. The Veteran Chief Economist at USDA testified that in 10 years he expects corn exports to increase 44 percent, most of that through the Gulf.

The world is rapidly changing, and the past will not be the future. Changes are occurring in South America, Europe, and Asia, which suggest that we can either anticipate the challenge, or surrender advantages at the expense of our producers. Our infrastructure is not ready for those emerging challenges and opportunities today. In 30 years the outlook is far bleaker.

The Corps takes great pains doing what Congress requires of it, but Congress needs to do its job as well, namely, we need to decide if Congress is going to focus on guessing about the future or shaping the future. We could possibly respond to conditions, or we could anticipate them and shape them. If we continue to study, I can guarantee you one thing, we will not be shipping, but we need to ship for the world markets and for our economy.

The Corps needs direction from us. I learned recently that the system on the Upper Mississippi which handles over 60 percent of corn exports and almost one-half of soybean exports is eligible for nomination to the National Registry of Historic places. Is the world's greatest power going to look ahead 50 years and decides that it plans to compete with an inland transportation system that is an historical relic? I think we have to and can do better.

The bipartisan effort to modernize our aged system envisions a balance with capacity to permit long-term growth as well as ecosystem restoration. We can and should do both.

Additionally, there will be proposals considered to address perceived problems in the study process. If these proposals assist the process, they will be welcome. Those designed to delay and frustrate the process, particularly for poor and less advantaged communities along the rivers will not be welcome.

I look forward to hearing from our diverse group of witnesses. I look forward to working with members of the committee to fashion a balanced bipartisan bill.

[The prepared statement of Senator Bond follows:]

STATEMENT OF HON. CHRISTOPHER S. BOND, U.S. SENATOR
FROM THE STATE MISSOURI

Welcome to this afternoon's hearings as we consider the role of the U.S. Army Corps of Engineers in meeting the nation's water resource needs in the 21st Century. I thank our witnesses for agreeing to testify.

We have not had a WRDA bill in 4 years. Despite distant editorial opinion to the contrary, citizens, communities, States and certainly members of the Senate see the value of what the Corps can do to provide safety, environmental protection and economic opportunity for our Nation. As I have said before, every year, there is a referendum on the Corps, which we see in Energy and Water Appropriations. Here members from north, south, east and west—both Democrats and Republicans—request that the Corps provide assistance to those taxpayers out in the working world.

As with other missions that are widely supported, the demand for services exceeds the supply of money. Senators have requested projects which total more than a great deal—most for ecosystem restoration—and it is clear that while I am adamant that we will have a balanced and forward-looking bill to present to the subcommittee and committee, we may have to subject some of these projects to a diet.

In the Midwest, an essential item for WRDA 04, which is long overdue, must be authorization of new locks to replace the aging infrastructure on the Upper Mississippi River and Illinois Waterway. The feasibility study of navigation and environmental improvements has been ongoing since 1993 and has cost over \$70 million. While our competitors invest to build, we study and study, and study. The construction time for this bipartisan effort to modernize locks is 15 years under optimistic forecasts. This means we are already at great risk of having a gridlocked navigation system before we get these projects in place.

USDA testified last week that transportation is often the determinant between markets won and markets lost and directly impacts our ability to compete and prosper. The Veteran Chief Economist at USDA testified that in 10 years, he expects corn exports to increase 44 percent—most of that through the Gulf. The world is rapidly changing, and the past will not be the future. Changes are occurring in South America, Europe and Asia, which suggest that we can either anticipate the challenge or surrender advantages at the expense of our producers. Our infrastructure is not ready for these emerging challenges and opportunities today. In 30 years, the outlook is far bleaker.

The Corps takes great pains doing what Congress requires of it, but Congress needs to do its job as well. Namely, we need to decide if Congress is going to focus on predicting the future, or shaping the future. We can passively respond to conditions or we can anticipate them and shape them. The Corps needs direction from us. I learned recently that the system on the Upper Mississippi, which handles over 60 percent of corn exports and almost one-half of bean exports may be eligible for nomination for the National Registry of Historic places. Is the world's greatest power going to look ahead 50 years and decide that it plans to compete with an inland transportation system that is an historical relic. We have to do better.

The bipartisan effort to modernize our aged system envisions a balance with capacity to permit long-term growth as well as ecosystem restoration. We can and should do both. Additionally, there will be proposals considered to address perceived problems in the study process. If these proposals assist the process, they will be welcomed. Those designed to delay and frustrate the process, particularly for poorer and less advantaged communities will not be welcome.

I look forward to hearing from our diverse group of witnesses and look forward to working with members of the Committee to fashion a balanced bipartisan bill.

Senator BOND. We will be having a number of Senators coming in and out as other commitments require them to be elsewhere. We have been joined by the Chairman of the full committee. I am going to ask him to make his comments, followed by Senator Cornyn while I check on a message.

**OPENING STATEMENT OF HON. JAMES M. INHOFE,
U.S. SENATOR FROM THE STATE OF OKLAHOMA**

Senator INHOFE. Thank you very much, Mr. Chairman. I want to thank you for holding this subcommittee hearing. We have decided that we would go ahead and do this at the subcommittee level. I will be looking forward to serving in that capacity. We want to thank you, General Flowers. This may be your last time here testifying. I do not know. You will be making some changes on the first of July. We have been very proud of the leadership that you have provided and I have enjoyed working with you.

The Corps of Engineers has provided a valuable service to the Nation for over 200 years. It has supported our troops in every combat that is out there, including the current operation in Iraq. Of course, it has also been instrumental in the creation of the most dynamic inland waterway system in the world I would say to all my friends out there in the audience, as well as Senator Cornyn, that many people are not aware that my State of Oklahoma is one of the most inland ports. We are most anxious to get our 9- to 12-foot channel completed. I think it has already been authorized. We just want to get it expedited as soon as possible. We also benefit from a lot of flood control programs. People do not realize that my State of Oklahoma actually has more miles of fresh water shoreline than any of the 50 States, including Texas. One of those reasons is that we have many Corps lakes and Corps activities that have been there.

So, as we move forward with the WRDA bill, I am looking forward to it. We would like to report the bill out of the committee by Memorial Day. I know that is an aggressive agenda. However, those who question the fact that we can be aggressive might remember what we did with the transportation bill. We plan to be just as aggressive in this.

While it is important that we ensure that the Corps is capable of meeting our future and water resources need, it is also important that we do not demand more than the Corps can humanly be capable of providing. No Federal Agency could complete all the projects requested by all Senators. It is important to recognize that with the limited staff and the limited budget available for the Corps, not to mention the already substantial backlog of existing projects, it would be unproductive to take an "authorize everything" approach. I am sure that our Chairman is not going to do that.

So I will be looking forward to working with, Chairman Bond, as this progresses, in meeting that deadline of getting this thing out of here by Memorial Day. Thank you.

[The prepared statement of Senator Inhofe follows:]

STATEMENT OF HON. JAMES M. INHOFE, U.S. SENATOR FROM THE
STATE OF OKLAHOMA

First, thank you, Senator Bond, for holding this subcommittee hearing. I'd like to offer a special welcome to General Flowers. Today is likely to be the last time Gen-

eral Flowers appears before our committee, as the change of command at the Corps will take place this July 1st. I thank you, General, for your service as Chief of Engineers and wish you well in your next endeavor. The Senate and the Corps will miss your leadership.

The United States Army Corps of Engineers has provided a valuable service to the Nation for over 200 years. It has supported our troops in every armed conflict in our nation's history, including the current operation in Iraq. The Corps has also been instrumental in the creation of the most dynamic inland waterway system in the world. Oklahoma, for example, has one of the nation's most inland ports, which provides hundreds of millions in economic benefits to the state.

Oklahoma also benefits from the flood control provided by dozens of Corps projects, not to mention the renewable electricity that is produced by the Corps at many reservoirs, and clean drinking water.

While the past successes of the Corps are important to note, the focus of this hearing is the future water resource needs of the Nation. And while I am aware of the legion of project requests that have come in from my fellow Senators, an important component of this hearing is to examine the Corps' capability, and determine what, if anything, we must do to ensure that the Army Corps is capable of meeting those needs. As our witnesses today will testify, there are significant and varied water resource needs across the Nation, and it is important that we pass a WRDA bill this year to address those needs. In order to increase the chances of getting a WRDA signed into law this year, I would like to report a bill out of the full committee by Memorial Day. I know that sets an aggressive schedule, but I think we should take the motto on the shield of the Corps to heart, which translated into English reads: "Let Us Try." While it is important that we insure the Corps is capable of meeting our future water resource needs, it is also very important that we don't demand more of Corps than they are humanly capable of providing. No Federal agency could complete all of the projects requested by all the Senators. It is important to recognize that with the limited staff and limited budget available for the Corps, not to mention the already substantial backlog of existing Corps projects, it would be unproductive to take an "authorize everything" approach to drafting this bill. I think that our colleagues in the House have struck a good balance in terms of the overall size of the bill, a balance that we should strive for here in the Senate as well. And while I know that every Senator has his or her own priority projects, we should keep in mind that if each Senator demands everything, we may all end up with nothing. I look forward to working with my colleagues to ensure that we give clear direction to the Corps to focus on completing the highest priority and most beneficial projects.

Senator BOND. That is a tall stump to jump, Mr. Chairman. We are going to need some help from the Administration getting some information to us. We will look forward to hearing that.

Now we are very pleased to have with us another member of the committee, Senator Cornyn.

OPENING STATEMENT OF HON. JOHN CORNYN, U.S. SENATOR FROM THE STATE OF TEXAS

Senator CORNYN. Thank you, Chairman Bond. I would like to express my gratitude to Chairman Inhofe and you for scheduling this important hearing. It has been more than 4 years since the passage of the last Water Resources Development Act. Since that time, the water resources needs of the Nation have continued to change and, indeed, expand.

In fact, it is expected that water will be the leading economic driver of the 21st Century. As such, we must be postured to focus on developing environmentally sustainable projects that incorporate the grassroots values and interests of regions and local communities. The severe droughts of recent times have reminded us that we cannot take our water resources for granted. The stakes are high in terms of our environment and our economy.

History also teaches that we can no longer manage water for single purposes. We must manage water to integrate all its uses in an

environmentally sustainable way. Many States and regions of the Nation have already begun the process of developing comprehensive water plans to meet the long-term water resources requirements needed to continue the economic and environmental sustainability of our Nation's water infrastructure.

In my home State of Texas alone, the State and local communities have identified almost \$18 billion of capital needs to ensure adequate water resources are available to Texans to meet the projected 50-year needs required to maintain the economic vitality of the State. The enormity of this problem is not, of course, limited to Texas alone and it cannot be ignored at any level of Government.

Mr. Chairman, I have received written statements from water interests, including Mr. Rod Pittman, chairman of the Texas Water Development Board, and Mayor Bob Young of Augusta, GA. These statements point strongly to the Federal role in providing technical assistance, data, and analysis to support our State and local governments in managing water resources.

Mr. Chairman, I would ask consent that these statements be entered into the record.

Senator BOND. Without objection, so ordered.

Senator CORNYN. These statements, of course, affirm what I have been talking about and what I know this subcommittee and committee believe, and that is that the Corps of Engineers is uniquely positioned to support State and local government leadership for integrated management and development of the Nation's water resources.

I would like to quote from the statement of the Chairman of the Texas Water Development, Mr. Rod Pittman, who said,

"Recently, Board staff have been working more closely with the Corps and that benefits from this enhanced relationship confirms that the payoff for even more collaboration is considerable."

His testimony is evidence that Corps partnerships with State and local governments can and work well to strengthen the management of our water resources. The Corps of Engineers must have the tools to enable them to work more closely with local and State partners to identify water needs and strategies for meeting these needs across the Nation.

We should give the Corps a primary mission in supporting State and local leadership of integrated water management. By sharing data and water analysis among the Federal, State, and local sectors, we can improve water management in this country and save money at all levels of government. Enactment of WRDA can make this happen.

I would also like to acknowledge the important role WRDA plays on the traditional mission of the Corps. The Corps is an invaluable part of the efforts throughout the country to address the ravages of coastal erosion and flooding. They are also vitally important to keeping our national economic engine working with the construction and maintenance of our navigable waterways. I look forward to working with the committee in moving WRDA along, and setting the stage for the future of water resources management in Texas and across the Nation.

Thank you, Mr. Chairman.

[The prepared statement of Senator Cornyn follows:]

STATEMENT OF HON. JOHN CORNYN, U.S. SENATOR FROM THE STATE OF TEXAS

Thank you, Mr. Chairman. I just want to say a few words as we begin this hearing.

It has been more than 4 years since passage of the last Water Resources Development Act. Since that time, the water resources needs of the Nation have continued to change. In fact, it is expected that Water will become one of the leading economic drivers of the 21st Century. As such, we must ensure that we are postured to focus on developing environmentally sustainable projects that incorporate the "grass roots" values and interests of regions and local communities.

The severe droughts of recent have reminded us that we cannot take our water resources for granted. The stakes are high in terms of our environment and our economy. History also teaches that we can no longer manage water for single purposes. We must manage water to integrate all its uses in an environmentally sustainable way. Many States and regions of the Nation have already begun the process of developing comprehensive water plans to meet the long term water resources requirements needed to continue the economic and environmental sustainability of our Nation's water infrastructure. In my home State of Texas alone, the State and local communities have identified almost \$18 billion of capital needs to ensure adequate water resources are available for Texans to meet the projected 50-year needs required to maintain the economic viability of the State. The enormity of this problem is not limited to Texas, and cannot be ignored at any level of government.

Mr. Chairman, I have received written statements from water interests including Mr. Rod Pittman, Chairman of the Texas Water Development Board, and Mayor Bob Young of Augusta, GA. These statements point strongly to the Federal role in providing technical assistance, data, and analysis to support our State and local governments in managing water resources. Mr. Chairman I ask consent that these statements be entered with my statement in the record.

These statements affirm what I have been talking about: that the Corps of Engineers is uniquely positioned to support State and local government leadership for integrated management and development of the Nation's water resources. I would like to quote from the statement of the Chairman of the Texas Water Development Board, Mr. Rod Pittman. He says, "Recently, Board staff has been working more closely with the Corps, and the benefits from this enhanced relationship confirms that the payoff for even more collaboration is considerable." His testimony is evidence that Corps partnerships with State and local governments can and will work well to strengthen management of water resources.

The Corps of Engineers must have the tools to enable them to work closer with local and State partners to identify water needs and strategies for meeting these needs across the Nation. We should give the Corps a primary mission in supporting State and local leadership of integrated water management. By sharing data and water analysis among the Federal, State, and local sectors, we can improve water management in this country and save money at all levels of government. Enactment of WRDA can make this happen.

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Senator BOND. Thank you very much, Senator Cornyn.

We have been joined now by the Ranking Member of the full committee, Senator Jeffords. Welcome, Senator.

**OPENING STATEMENT OF HON. JAMES M. JEFFORDS,
U.S. SENATOR FROM THE STATE OF VERMONT**

Senator JEFFORDS. Thank you, Mr. Chairman.

Today we will hear testimony from Administration officials and witnesses from around the country on the Army Corps of Engineers' Water Resources Programs. Starting with the Water Resources Development Act of 1986, this committee has considered

legislation to authorize the Corps projects in the Nation's interest on a biennial schedule.

Some years, we did not get a bill; some years, we did.

This year, we have not yet received an Administration WRDA proposal. Nevertheless, I am optimistic that at the end of this session of Congress, we will see a WRDA 2004 to be enacted into law. Not too much time remains this year, but I think we can do it.

Last week, members of my committee staff traveled to Vermont where they were joined by military officers and civilians of the Corps' North Atlantic Division, the New York District and the New England District. In Bennington, Norwich, and Barre, my staff and the Corps personnel hosted roundtable workshops with State and local officials, conservationists, and other interested Vermonters to talk over how to make the Corps' processes more tangible for smaller cities and towns.

I would like to take this opportunity to thank Brigadier General Bo Temple, Colonel John O'Dowd, Lieutenant Colonel Brian Green, Jan Rasgus, Joe Vietri, Bobby Byrne, Gene Brickman, and Paul Tumminello for making these workshops an outstanding success. I am pleased to express my thanks to them.

Mr. Woodley and General Flowers, as you both already know, you have a great team there. I want to amplify that.

One participant in the Barre workshop joins us here this afternoon. Bill Howland is the executive director of the Lake Champlain Basin Program. He will speak about the Corps' mission of ecosystem restoration. The Basin program is a best-case scenario for Corps participation, as I am sure your testimony will tell us. Thanks, Bill, for making the trip down from Vermont.

Another project in Vermont that has seen some real progress, thanks to the hard work of the Corps, is the Waterbury Dam. Unfortunately, troubling budget cuts from the Corps threaten the steps forward made in the past few years.

The Civil Works Program of the Corps is critical. The President's proposed budget will put the Corps in critical condition.

I am committed to working to keep the Corps at the adequate national funding levels to deal with the needed projects that will enhance and improve our country's and our communities' water resources. It is important to listen to everybody concerning program changes and the needs of the Corps. I think we have a very distinguished panel to testify before this committee today.

Thank you, Mr. Chairman.

[The prepared statement of Senator Jeffords follows:]

STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR
FROM THE STATE OF VERMONT

Today, we will hear testimony from Administration officials and witnesses from around the country on the Army Corps of Engineers water resources programs. Starting with the Water Resources Development Act of 1986, this Committee has considered legislation to authorize Corps projects in the nation's interest on a biennial schedule. Some years, we didn't get a bill; some years, we did. This year, we have not yet received an Administration WRDA proposal. Nevertheless, I am optimistic that at the end of this Session of Congress, we will see a WRDA 2004 be enacted into law. Not too much time remains this year, but I think we can do it.

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Mr. Woodley and General Flowers, as you both already know, you've got a great team there. One participant at the Barre workshop joins us here this afternoon. Bill Howland is the Executive Director of the Lake Champlain Basin Program, and he will speak about the Corps mission of ecosystem restoration.

Ecosystem restoration is where Vermont's needs and the Corps' capabilities match best. The Basin Program is a best-case scenario for Corps participation, as I'm sure your testimony will tell us. Thanks, Bill, for making the trip down from Vermont.

Another project in Vermont that has seen some real progress thanks to the hard work of the Corps is the Waterbury dam. Unfortunately, troubling budget cuts for the Corps threaten the steps forward made in the past few years.

The civil works program of the Corps is critical; the President's proposed budget will put the Corps in critical condition. I am committed to working to keep the Corps at adequate national funding levels to deal with the needed projects that will enhance and improve our country's, and our communities', water resources.

It's important to listen to everybody concerning program changes and the needs of the Corps, and I think we have very distinguished panels to testify before this Committee today.

Thank you.

Senator BOND. Thank you, Senator Jeffords.

We have been joined by Senator Chafee.

Senator CHAFEE. Thank you, Chairman Bond. I would just like to say to the General, congratulations on helping us with our Providence River dredging project. It is going along well. Mr. Chairman, I know I have a very positive experience with the Corps in my State, but I know in different regions of the country there are other issues.

I look forward to the hearing.

Senator BOND. Thank you very much, Senator Chafee.

As I have told the witnesses, and I will tell my colleagues, because we have such a long list of witnesses, we have our witnesses to give us the highlights and edited version of their testimony. We will take the full testimony in the record.

Our first panel is the Honorable John Paul Woodley, Assistant Secretary of the Army for Civil Works of the Army Corps of Engineers, and Lieutenant General Robert B. Flowers, Chief of Engineers, the Army Corps of Engineers.

Mr. Woodley.

STATEMENT OF HON. JOHN PAUL WOODLEY, ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS, ARMY CORPS OF ENGINEERS, WASHINGTON, DC

Mr. WOODLEY. Thank you, Mr. Chairman. It is always a delight and a pleasure to be with you in this historic hearing room. I just wish that all the 25,000 incredibly dedicated professionals that work in the Civil Works Program of the Corps of Engineers could be here today to hear the words that the subcommittee has had for the efforts that they have.

Senator BOND. Please convey them.

Mr. WOODLEY. I do my poor best, Mr. Chairman, to undertake that.

It is privilege once again for me to appear with my colleague, a great leader, a great engineer, and a great soldier, Lieutenant Gen-

eral Robert B. Flowers, the 50th Chief of the Army Corps of Engineers. He and I earlier this month, Mr. Chairman, provided our Civil Works Strategic Plan to the committees and subcommittees of Congress responsible for water development authorizations and appropriations, including this subcommittee.

We recognize the plan is and probably always will be a work in progress. We are anxious to work with you and our colleague at the Office of Management and Budget, the other House, and other interested Americans across the country to establish our program goals, objectives, and performance measures, to provide a sound basis for setting our performance targets, and building future budgets.

That is exactly the type of thing, Mr. Chairman, that we and the Corps of Engineers in the Civil Works Program look to the Water Resources Development Act to provide for us your direction on water resources development that will provide the content for that strategic plan, and the direction that the Nation wishes to take in this regard.

We are looking forward to pursuing those projects that are fully justified and to improve the ways in which we implement and fund them. The Strategic Plan identifies some broad principles for our work going forward to evaluation using sound analytic methods, current data where necessary or where appropriate, and external peer review processes for our analysis and science.

We want to see those projects that meet current economic and environmental standards and address contemporary needs.

We have set out these principles, but I want to mention that peer review is certainly something that needs to be addressed in this context. We are very supportive of requiring an outside independent peer review, where appropriate, for Corps projects. This can be a very useful tool and would add significant credibility to our project analysis and in our decisionmaking process and ability to judge on the merits of a program.

Looking forward, we are expecting very soon to seek our public comments on draft reports that are underway for two important studies during this calendar year. The one you mentioned, Mr. Chairman, the Upper Mississippi River/Illinois Waterway Navigation Study, as well as the Louisiana Coastal Area Ecosystem Restoration Study. Both of these are of critical importance to the Nation.

We are working within our Administration and with interested parties in the Basin and in Louisiana and State parties as a project sponsor to completing these studies in a timely manner. Our goal for each of these, Mr. Chairman, is that our recommendations will be technically sound, environmentally responsibly, highly cost effective, and in the best overall interest of the Nation.

Once again, thank you very much for the opportunity to appear. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Woodley. That sounds good.

Now, as has been noted, this may be General Flowers last opportunity of testifying before Congress. I know it is with great sadness that he is leaving in June. His smile gives it away.

[Laughter.]

Senator BOND. But General Flowers, I would like to congratulate you on your heroic efforts to keep the Corps alive through a period that can only be called "thin and thin." We welcome your testimony.

**STATEMENT OF LIEUTENANT GENERAL ROBERT B. FLOWERS,
CHIEF OF ENGINEERS, ARMY CORPS OF ENGINEERS, WASHINGTON, DC**

General FLOWERS. Mr. Chairman and distinguished members of the subcommittee, it is an honor to be testifying before you again, and along with the Secretary to testify on the role that the Corps of Engineers plays in meeting the Nation's water resources needs.

The Corps has a long history of public service, from our beginnings in 1775 at Bunker Hill to our challenges in the 21st Century. The mission of the Corps has evolved from that of builder to the roles of developer/manager and protector of water resources. The Corps has always adapted to the changing needs of the Nation, and we will continue to do so.

Our Civil Works Program has changed, along with society's changing needs, values, and priorities for good water management. For example, the Water Resources Development Act of 1986 emphasized the national expectation that project partners be more involved in the formulation and financing of solutions to water resources problems. We responded to this direction and the Nation's needs.

Today the greatest water challenge facing our Nation is managing our water resources in a fully integrated manner to sustain both our environment and our economy. The Corps is ready for this role.

There are three areas in which the Corps is making changes. First, reducing the backlog. Frankly, we have too many projects on the books. Some do not address solutions in a contemporary way. We are considering projects for deauthorization. We have billions of dollars worth of inactive projects that technically remain on our books, whose designs will not solve the original problems or for which there is no longer support.

Second, we have been working very hard internally to transform the Corps and improve business processes. We are making our processes more open and collaborative. We are becoming a team of teams within the organization, focusing on eight regional business centers which will move effectively and deliver service to the public and the Armed Forces.

We have established the Corps environmental operating principles as a clear commitment to accomplishing our work in environmental sustainable ways, and with the express purpose of instilling these principles as individual values in all members of the Corps team. We are undertaking major investments in improving economic methods and tools for all of our planning activities, but in particular for navigation evaluations. We have allocated additional resources to strengthen our internal review capability. The Office of Water Project Review in headquarters effectively doubles the size of our Policy Compliance Review staff.

Third, we have reaped immense benefits from the increased collaboration and partnership within the Federal Government and with non-Governmental organizations to move us toward a watershed approach. We have already established watershed principles and published watershed guidance for our field offices. Some recent watershed management efforts, such as the Comprehensive Everglades Restoration Plan, already promote active participation of all interested parties in planning and decisionmaking. A similar effort is taking place with the Louisiana Coastal Area Ecosystem Restoration Project.

Quite frankly, we need to do more. We need Congress' help if we are to truly take a watershed approach.

Transforming the Corps will not be easy, but we stand ready to work with all of you to address these issues. Water resources management infrastructure has improved the quality of our citizens' lives and supported the economic growth and development of this country.

Our systems for navigation, flood and storm damage reduction projects, and efforts to restore aquatic ecosystems contribute to our national welfare. The stream of net benefits realized has reduced transportation costs, avoided flood and storm damages, and improvements in environmental value have been considerable.

The Civil Works Program is a valuable asset in support of the National Security Strategy. It provides a trained and experienced work force with world-class expertise who respond quickly to our Nation's need in times of emergency and threat.

The Corps of Engineer employees are supporting the global war on terror with a wide range of capabilities. Civil Works employees are architects, engineers, scientists, and other specialists, and are providing invaluable assistance in helping to restore and rebuild Iraq and Afghanistan's infrastructure.

Throughout my career, I have been privileged to work with the outstanding men and women who make up the Army Corps of Engineers. I am making the changes necessary to ensure the continued integrity of the Corps Civil Works Program so that the Corps can continue to fulfill its role in addressing the many water resources needs of this great Nation.

Thank you, Mr. Chairman and members of the subcommittee.

I am prepared to answer your questions. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, General Flowers.

I am going to ask the staff to run the 4-minute time on me and all the other questioners. I have a couple of hours worth of questions. I will try to submit all but about 40 minutes of them for the record.

Let me begin with Mr. Woodley. Given what we have heard on the overall process the Corps has followed, does the Administration have an official position on the Mississippi River/Illinois Waterway Project?

Mr. WOODLEY. No, Mr. Chairman, except that we are in favor of proceeding and completing the analysis. It is the analysis that is underway that we will be using to formulate our position and will be using to inform our decisionmaking process.

Senator BOND. I realize you are new to the scene, Mr. Woodley, but for over 10 years and \$70 million, and with the NAS and USDA saying that we cannot make a forecast 50 years in advance, what are we getting for all the money we spent on this project, an answer that anyone can have confidence in, despite all the hard work and best intentions?

Mr. WOODLEY. We certainly hope so, Mr. Chairman.

Senator BOND. Well, Mr. Woodley, what do you think the price of corn will be, the price of rail, the price of water transport, Chinese demand for corn, Argentine corn production, the new corn-based industrial products that will emerge through biotechnology, the demand for ethanol, the demand for barge-borne container shipping, and other factors given the international geopolitical and economic conditions in say, 2030?

[Laughter.]

Senator BOND. All right.

Mr. WOODLEY. I thought that was what we were going to get for our \$70 million, Mr. Chairman.

Senator BOND. You do not have it and you are not going to get it.

[Laughter.]

Senator BOND. I have a transcript of some testimony from the Secretary of Agriculture and Dr. Keith Collins, the Chief Economist that I will share with you in the record about agriculture exports, water transportation, and the reliability of forecasts beyond 10 years. Dr. Collins noted that transportation efficiency and the ability of farmers to win markets at higher prices are fundamental related, demonstrated by history. He said that he would expect corn exports over the next 10 years to rise about 45 percent with 70 percent of that growth through the Gulf.

I asked him why he did not do a 50-year forecast, and he noted that doing it for 10 years is heroic enough. There are too many risk factors going on for us to go beyond a decade.

End of story.

General Flowers, is it true that first half of the last century, the first feasibility report for a navigation project on the Mississippi River said the current system was not justified before Congress told them to find a better answer?

General FLOWERS. Yes, sir; that is absolutely true.

Senator BOND. General Flowers, is it clear to you and the stakeholders that you consult that Congress was acting in the best interest of the region and the Nation by rejecting Major Hall's original finding that the navigation project on the Mississippi River was not feasible?

General FLOWERS. Sir, it would appear that Major Hall had it wrong.

Senator BOND. General, could you describe the overall process for the study and where you are in the process in terms of transparency? Can you give a rough estimate as to how many public meetings, public hearings, and other public events have been held to discuss the issues related to the Lock and Ecosystem Restoration Study?

Mr. WOODLEY. Yes, sir. I would like to start by answering the last part first. Since the beginning of the study in 1993, there have

been 35 meetings of the Governors Liaison Committee, 28 meetings of the Economic Coordinating Committee, among the States along the Upper Mississippi and Illinois waterways, and we have had 44 meetings of the Navigation and Environmental Coordination Committee. There have been 130 briefings for special interest groups. We have distributed 24 newsletters. There have been six sets of public meetings to present in 46 locations. We have had about 4,285 personnel attend those meetings.

As you indicated, sir, this study has been going on since 1993. We have amassed a huge amount of data and a body of knowledge that is useful. We have achieved that with the money that has been received. When we restarted the Upper Mississippi Navigation Study following the criticisms and the National Academy of Science report in 2001, we established to be a very open, collaborative process, and very inclusive.

Recognizing, as you have noted, that we were moving from an area that we were comfortable with and analyzing our projects of micro-economics to one of macroeconomics and looking at something as big as the Upper Mississippi and Illinois Waterway system.

So the decision was made in this very collaborative process to identify a range of alternatives, apply all of the knowledge that we had gained, all of the various economic models, and bring them into this process. We have done that.

Our intent is to base our recommendations on all of this amassed knowledge.

Senator BOND. Thank you very much, General.

Following the tradition of this committee, we will go back and forth from the Majority to the Minority side. I see that we have been joined by the Senator from Florida, Senator Graham.

Senator GRAHAM. Thank you very much, Mr. Chairman.

Mr. Chairman, I would ask that my opening statement be made part of the record.

Senator BOND. Without objection, so ordered.

[The prepared statement of Senator Graham follows:]

STATEMENT OF HON. BOB GRAHAM, U.S. SENATOR FROM THE STATE OF FLORIDA

Mr. Chairman, thank you for calling this hearing today. It is very important that we take this opportunity, at the beginning of the process of organizing a WRDA bill for 2004, to establish some goals for what we want to achieve in this legislation.

By way of example I propose that this subcommittee should focus on the following goals:

GOAL 1 BEGIN ELIMINATING THE OPERATIONS AND MAINTENANCE BACKLOG

The latest figures I have heard for the Corps' operations and maintenance backlog range from \$33 billion to \$48 billion. I understand that the Corps will testify today that the backlog has been reduced to about \$11 billion, but that number is largely derived from the fiscal year 05 budget request cancellation of beach restoration projects nationwide.

As a Senator from a coastal State, I can assure you that simply canceling these projects to give the appearance of a reduced backlog is not an acceptable answer.

I would like to see real steps taken to deauthorize Corps projects that are no longer economically justifiable. I offer an ideal candidate project in my own State—the Apalachicola River in northwest Florida. Dredging of the Apalachicola is not only economically wasteful, it is damaging to the local economy and the environment.

I want to thank Mr. Scott Faber, who will testify later in this hearing, for the excellent work he has done to help deauthorize the Apalachicola River project.

We can continue to ignore the backlog of Corps projects and simply authorize and authorize as each WRDA bill comes along. Or we can take the fiscally responsible route and prioritize our nation's needs based on some kind of rational process of review.

GOAL 2 BRING SOME MUCH NEEDED REFORMS TO THE CORPS

One of the most important elements lacking in the Corps' current structure is an independent review of Corps projects.

This committee recognized the role for independent peer review when we authorized the Comprehensive Everglades Restoration Plan (CERP) in WRDA 2000. In fact, the Indian River Lagoon Project, the first CERP project for authorization this year, is being reviewed independently right now. I want to thank Secretary Woodley and General Flowers for their foresight in initiating this process. Independent review is invaluable if we are to choose projects that represent a responsible use of taxpayer money.

I look forward to hearing the testimony from our witnesses.

And, Mr. Chairman, I look forward to working with you to draft a WRDA bill that we can proudly bring before the full Senate. Mr. Chairman, I have some testimony from the city of Tarpon Springs in Florida regarding alternative water supply projects.

I request that the City's testimony be included in the record. Thank you.

Senator GRAHAM. Mr. Chairman, I have a statement from the city manager of Tarpon Springs, FL, which I would like to have entered into the record.

Senator BOND. Without objection, so ordered.

[The referenced document follows on page 141.]

Senator GRAHAM. Thank you very much.

I am sorry, Mr. Woodley, I did not get to hear your commentary, so I am going to address most of my questions to General Flowers.

General Flowers, I was interested in the emphasis that you gave. I believe it was No. 1 in your list of priorities on maintenance. Could you evaluate the status of our inland waterway system? Where was it in 1990 and where is it today? Where do you project it will be 10 years from now?

General FLOWERS. An indicator that I would use, and that I think had great credibility, is the report card that the American Society of Civil Engineers does every 2 years. The last one done was in 2003. In 2003, the American Society of Civil Engineers gave the inland waterways a D-plus grade.

Senator GRAHAM. That was in what year?

General FLOWERS. 2003. They rate 16 areas of U.S. infrastructure, one of which is the inland waterway system.

That grade, would it have been given about 10 years ago, probably would have been a C or a C-plus. Most of our inland waterway systems and our sets of locks and dams have reached or exceeded their design life. I have great concern that in another 10 years that something might not happen that would cause the system to fail.

Senator GRAHAM. At the current level of funding, what do you think the grade is likely to be in the year 2010?

General FLOWERS. Sir, we will probably be failing by the year 2010 at where we are now, sir. Each year our backlog of critical maintenance for our inland waterway system grows. We are currently at over \$1 billion in critical maintenance backlog for our inland waterway system.

Senator GRAHAM. What are some of the consequences of this declining maintenance of our inland waterway system?

General FLOWERS. Sir, we have had outages on the inland waterway system, gates that fail, concrete that is badly falling and in

some cases exposing the reinforcing steel, causing great concern. Because it is a system, if you have a breakdown at a critical code on the system, it can shut down the system. Today we move well over 2 billion tons of commerce on our inland waterway system.

Senator GRAHAM. Has it resulted in either increased cost or greater interruption of service to users and end-users?

General FLOWERS. Yes, sir; it has. I would have to take that for the record and indicate to you the magnitude of that.

But I can tell you it has.

Senator GRAHAM. Thank you.

Senator BOND. Without objection, so ordered.

Senator GRAHAM. Organizationally, how much responsibility for dealing with this maintenance backlog is at the district level, and how much of it is at the headquarters level?

General FLOWERS. Sir, we have made an attempt, because of the amount of funds that we have been given, to use them as wisely as we can. We have all of our districts articulate the needs within the area that they are responsible for. We are organized on watersheds.

We then bring all that forward through our regions, and then try to take a business line approach as to how we would prioritize and what we would fund in order to try to get the best and be the best stewards we could of the money that we have been given.

The data is put together at the local level. It is then regionalized. We make strategic decisions collaboratively with our districts, our regional business centers, our divisions, and Washington.

Senator GRAHAM. You mentioned, as another one of your priorities, that there are more projects to which you have been given responsibility than there are dollars to pay for them.

Senator BOND. Senator Graham, somebody sat on the timer.

I think you may be getting close to it.

Senator GRAHAM. We have a second round.

Senator BOND. I am concerned. This one panel is very important, but I am concerned about the number of witnesses we have.

Senator GRAHAM. Well, then I am going to go to a Florida issue which relates to what we have been talking about.

One of the most inefficient inland waterway systems in terms of costs of maintenance by ton weight or dollar value of product ship, and in terms of the cost of economic damage to the area through which it runs is the Apalachicola River in the panhandle of Florida. Would that be the kind of river that you might consider recommending for deauthorization in order to free up some money that could be used on higher priority inland waterway projects in the Mobile Office district?

General FLOWERS. Sir, it will compete in the manner that I described earlier. If it were low use, then it probably would not be a candidate for deauthorization, if we are talking about operation and maintenance funds, but it might not receive any money to be maintained.

Senator GRAHAM. If the President fails to recommend operation and maintenance funding for an active project, is that tantamount to an Administration statement that they think it should be deauthorized?

Mr. WOODLEY. I do not believe we would send you a signal in such veiled terms, Senator. If we asked to have something deauthorized, then that would be an explicit recommendation.

Senator GRAHAM. One last question, Mr. Chairman.

What are we to assume if the Administration, and particularly if it is a repetitive non-recommendation of operation maintenance funds for an active project? Does that not seem to say that the Administration believes the project may not be either economically or environmentally or otherwise sustainable?

General FLOWERS. It would seem that I would say really nothing more than given the other priorities, that priority was not able to be met. We have and we are prepared to offer up suggestions for deauthorization, as I indicated in my opening statement. We have several. I do not recall off the top of my head if that is one of them.

Senator GRAHAM. Thank you. Thank you, Mr. Chairman.

Senator BOND. Thank you very much Senator Graham.

We will now turn back to Senator Cornyn. Senator Clinton has come in. We will then go to Senator Chafee and Senator Allard after that. We will try to see if we can get the timer working.

Senator CORNYN. Thank you, Mr. Chairman.

Secretary Woodley and General Flowers, we have a saying in my State that perhaps is not just limited to Texas and that is that whiskey is for drinking, but water is for fighting.

Certainly there are very few issues that are more important in my State, to our economy and to the quality of life, and to our environment than water issues. But I note that just from your testimony here today and other background information, obviously that the number of demands on the Civil Works mission of the Army Corps of Engineers dwarfs any commitment that we have been able to make so far to fund or perhaps to prioritize that work.

But General Flowers, I want to ask you specifically about the watershed approach to projects. As I understand from your testimony, you believe that perhaps there is a better approach than is currently allowable under the single focus, geographically limited projects focus under which the Corps currently works that would allow for what you call the watershed approach. It would allow you to look at water needs more comprehensively in a way that eliminates inner basin disputes, among other things.

Would you please expand a little bit more upon what the current impediments are and what the Corps needs in order to deal with this in a better, more sensible fashion?

General FLOWERS. Yes, sir. As a consequence of WRDA 1986, with its emphasis on cost sharing, et cetera, we have become a project-focused agency where we tend to look at a project in isolation and determine whether or not this particular project is economically justified.

I believe the engineering and the science is good enough today for us to go back to our roots, which was a more comprehensive look at water resources that would allow, I believe, the decision-makers to make more informed decisions on commitment of resources as we move forward.

I think we are looking for some strategic direction from the Congress. We, the Corps of Engineers, are looking for some strategic direction from the Congress on how we should move to the future.

Senator CORNYN. Well, it is my hope certainly that we can provide that guidance through this reauthorization and otherwise. Just in the short time that I have, let me also followup on a comment that you made, I believe, in response to the Chairman's question about the Mississippi River. You referred to large volumes of data that the Corps has generated.

I am just wondering. Is the data that the Corps generates and accumulates, is that generally available to local and State government, or are there things that we need to look at that would perhaps allow for greater sharing of that information that would, in turn, facilitate the overall mission of improving water resource projects in our States and across the Nation?

General FLOWERS. Sir, I think we do need some additional authority to permit us to share and to provide technical information and data that we have to State and local governments. I think that would be something very worthwhile.

The old paradigm was always if the Federal Government was involved, we had to be paramount and there had to be a Federal interest before we could be involved with something.

I think the day is probably coming where it is smart if a Federal Agency has information that will aid the State or local government, and can be value added for them to do their job of providing better governance, that we ought to be able to do that without having to take over.

Senator CORNYN. Thank you. Mr. Chairman, my time has expired for now. Thank you.

Senator BOND. Thank you very much, Senator Cornyn. I will go out of order on this side, Senator Clinton, if you do not mind, since we have been joined by the ranking member of the subcommittee who has a few other jobs trying to help run the floor which is always interesting.

Senator Reid, thank you very much for being with us.

Senator REID. Thank you, Mr. Chairman.

Senator Clinton, I will be very, very brief. I simply want to be a voice crying in the wilderness. I think that you do a great job for the Corps. We have given you very few tools to work with in recent years. I repeat, you have done much with a little bit. It is a shame that we do not give you more.

Thank you, Mr. Chairman.

General FLOWERS. Thank you, sir.

Senator BOND. Amen.

I will go to Senator Clinton.

Senator CLINTON. Thank you, Mr. Chairman.

I happen to agree with that comment by my friend and colleague. I think that the Corps does a tremendous amount of good, and particularly in my State of New York we see many examples of that. I am looking forward to the next panel when we will have a New York witness, the Suffolk County Executive, Steve Levy. We have some specific issues about shoreline protection and beach erosion that are very important to us.

I would ask, Mr. Chairman, that my entire opening statement be placed in the record.

Senator BOND. Without objection, so ordered.

[The prepared statement of Senator Clinton follows:]

STATEMENT OF HON. HILLARY RODHAM CLINTON, U.S. SENATOR
FROM THE STATE OF NEW YORK

Thank you, Mr. Chairman. I am pleased to be here today to talk about the Water Resources Development Act. I am particularly pleased that we have a New York witness, Suffolk County Commissioner Steve Levy. I look forward to his testimony and the testimony of all of our witnesses.

In my brief opening remarks, I want to touch on several points. First, I want to talk about some of the important work that the Corps is doing in my State of New York. Second, I want to talk about some policy changes that the Administration has included in the fiscal year 2005 budget. And finally, I want to talk about some of the things that I hope we can address as we put together the WRDA bill in the EPW committee this spring.

Just 2 days ago, I was on Long Island, where I had the opportunity to learn first-hand about important work that the Corps of Engineers is doing with a range of Federal, State, and local partners. The purpose of the Corps' study there—which is known as the Fire Island to Montauk Point Reformulation Plan—is to develop a comprehensive, long-term plan to protect areas that are prone to flooding, erosion and other storm damage. This plan would replace the numerous ad-hoc measures that have been used to protect individual areas with a comprehensive management approach that considers the entire coastal system.

Unbelievably, the Administration zeroed this project out in their fiscal year 2005 budget, even though this long-running study is just a few years from completion. I know that Steve Levy will have more to say about that project, but it is one example of vital work that the Corps of Engineers is doing in New York.

The Corps is also doing critical work at the Port of New York and New Jersey. The Port of New York and New Jersey is the largest port complex on the East Coast of North America, and is a major economic engine and trade hub for the region and the country. In 2002, the Port of New York/New Jersey handled 21.6 million tons of general cargo, and accounted for 60 percent of the containerized cargo handled by all North Atlantic ports, and about 14 percent of containerized cargo handled by all U.S. ports. Because of the increasing number of ever-larger ships in international shipping, the Port is currently working with the Corps and State agencies to deepen and widen several channels in the Port. These improvements are critical to the competitiveness of our economy, which is increasingly trade dependent.

Mr. Chairman, there are many other projects that the Corps is working on in New York—literally from Buffalo to the tip of Long Island. And I look forward to working with the Chairmen and Ranking Members of the full committee and the Transportation and Infrastructure committees as we move forward with WRDA so that we can enhance some of the ongoing projects and lay the groundwork for others.

I also hope that in context of the WRDA bill, we can address several important policy issues. First, I want to register my strong opposition to the policy reversal contained in the President's fiscal year 2005 budget with respect to beach renourishment. This was reflected in the budget, and communicated to States and localities in New York and other coastal States in a February 2 letter from Assistant Secretary Woodley.

That letter informed States and communities that: "the Administration has determined that Federal participation beyond the initial renourishment phase no longer can be supported in the budget." This decision not only breaks commitments made by the Federal Government to States and communities in Project Cooperation Agreements that have already been executed; it also flies in the face of policy established by Congress in the 1996 WRDA bill.

Unfortunately, this is part of a larger agenda that the Administration has to starve beach renourishment projects. The fiscal year 2005 budget cuts \$121 million from fiscal year 2004 levels for beach projects, and I am going to be working with my colleagues here, as well as Tim Bishop and others in the House to restore some of these cuts.

Finally, I want to briefly touch on several other issues that I think we need to look at in WRDA. I strongly believe that the Corps does outstanding work throughout New York, and I know that this work is valued by my constituents. At the same time, there have been several reports over the last several years that have shaken public confidence in the way that the Corps analyzes its projects, and in the way that the Corps mitigates ecological damage caused by its projects.

I have had some experience with this myself in dealing with what is known as the Great Lakes Navigation Study, a Corps of Engineers study that is in its initial phases. This study contemplates what I believe to be an ecologically damaging proposal to deepen and widen shipping channels in the St. Lawrence Seaway for what are questionable economic benefits. I have worked to put an end to this study, but

if the study must go forward, it has to be done in a credible manner. And I think that the public deserves to expect credible analyses when it comes to large Corps projects. So I think we need to look at those issues as we go forward.

Thank you.

Senator CLINTON. I want to emphasize two of the projects that are of particular concern to New York. First, the question has been raised about the ongoing work for the Fire Island to Montauk Point shoreline reformulation plan. It is troubling that the President's fiscal year 2005 budget reverses policy with respect to beach renourishment.

In a February 2d letter, Secretary Woodley, you informed local communities and coastal States like New York of this reversal of policies, that you had determined that Federal participation beyond the initial renourishment phase no longer can be supported in the budget. Now, this reversal breaks faith with decades of understanding on the part of States and communities made by the Federal Government and embodied in project cooperation agreements that have already been executed.

It does fly in the face of policy established by Congress in the 1996 WRDA bill. It particularly impacts on the southern shore of Long Island, the Fire Island to Montauk project which has been exhaustively studied now for 20 years.

We have spent about \$30 million in State, local, and Federal money. We are less than 2 years away from actually finishing this incredibly complex study so that then communities could determine their priorities.

The amount of money that would be required to finish this study, after all these years, is relatively minuscule compared to the Corps' budget and to the overall budget that we are looking at. I would strongly urge that you work with us to try to figure out a way. It is one thing not to start new projects or to tell communities that if we start this project you are not going to get the Federal share for renourishment.

But to take a project that has been going on for 20 years, which has literally brought everybody together after lots of conflict to look at the environmental and economic impacts, I think is a waste of taxpayer dollars because we are right at the brink of actually doing what is not only a tremendous job for this section of our coastline, but which will have implications for the rest of our coastline around the country. There are many lessons that can be learned from that.

I would like to work with you, Mr. Secretary, to try to find a way to just push this over the goal line. We are literally at the one-yard line. We have gone so far down the field together. Could we work together?

Mr. WOODLEY. Absolutely, Senator. I would be delighted to look into that and work with you on it.

Senator CLINTON. Thank you, sir.

Second, there is another project. I heard you mention as I came in that you have suggestions for deauthorization. I want to give you one so you can add it. As I try to find, with your cooperation, help to finish the shoreline project, I think that we should end the very beginning efforts with respect to the Corps Great Lakes Navigation Study. There is a considerable and growing body of opinion

that if it were to lead to any action in the St. Lawrence River, it would cause severe environmental and associated economic problems.

I would really urge that you take a hard look at this.

There will be a very long road to go down before any conclusions were drawn. There will be just every opposition one can imagine to going forward. But to the extent that the study continues, I want to ensure that the Corps conducts it in a way that fully addresses all of the issues. Public involvement is critical. It is my understanding that a reconnaissance study was released in February 2003 with a commitment from the Corps to conduct a supplemental study that will look in detail at the current navigation system before you move to a full feasibility study.

It has been more than a year since that memorandum of agreement was signed with respect to the supplemental study, but there has been no public information about the scope or plan for the study. I think that we should have a commitment for some public hearings.

General, I would ask that you make a commitment to having a public hearing to look at this study in New York at your earliest possible convenience.

Mr. WOODLEY. Yes, sir.

Senator CLINTON. Thank you. Thank you, Mr. Chairman.

Senator BOND. Thank you very much, Senator Clinton.

I will now turn to Senator Chafee.

Senator CHAFEE. Thank you, Mr. Chairman.

Where are we on independent review of large-scale projects? How is the Corps looking at that?

General FLOWERS. Sir, we have testified that we would welcome independent review. We have requested funds to do an independent review, and to do a look-back at our previous projects. I think an independent review is a worthy subject to be put into a WRDA bill, were one to be done that would, again, provide some strategic direction to the Corps and set our left and right limits as we move forward. We welcome that.

Senator CHAFEE. How much did you budget for that? Did you say you budgeted for that?

General FLOWERS. I think we requested \$500,000; yes, sir.

Senator CHAFEE. Is there language in the House bill that you support?

General FLOWERS. I believe we are not to comment on pending legislation. I do not recall off the top of my head the language that was in the bill, sir, so I would have to take that one for the record, I guess.

Senator CHAFEE. Thank you.

Senator BOND. Without objection, so ordered.

General FLOWERS. But we are in favor of independent review. I think there is a dollar value at which it should be done. The only thing that we have testified to is that we would recommend that there would be concurrent review so that it does not add additional time onto an already very lengthy process.

Senator CHAFEE. Thank you, General. That is all I have.

Thank you, Mr. Chairman.

Senator BOND. Thank you, Senator Chafee. That will help us with the time.

Senator Jeffords.

Senator JEFFORDS. Thank you, Mr. Chairman.

Good afternoon. I would like to talk about the Waterbury Dam, Mr. Woodley. The Waterbury Dam is one of three dams designed and constructed by the Corps in the 1930's. It was built in response to a 1927 flood in which 55 people lost their lives, and damages were up to \$13.5 million in those days. They were included in the Winuski River Basin.

I remember it only because my parents were alive at that time. This roared down through the State and took out towns and everything else. The dam was rebuilt mainly as a flood prevention program. Now we are concerned as to the health of that dam and what the plan is. It was built in response to that flood.

Since 1985 there has been concern about the stability of the dam. The Army Corps is stabilizing it, and it is nearing completion. In fact, today the New York District is announcing the restart of construction work on the dam. Now that spring is approaching Vermont.

I ask unanimous consent to include the letter of March 24th from the New York District describing the project.

Senator BOND. Without objection, so ordered.

[The referenced document follows:]



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

Programs and Project Management Division

24 March 2004

Honorable James M. Jeffords
United States Senate
728 Hart Senate Office Building
Washington, DC 20510

Dear Senator Jeffords:

Thank you for your continued interest in the Waterbury Dam, Vermont project and our ongoing efforts to construct seepage control measures in the dam to reduce the risk to the people of Vermont. The \$6,000,000 appropriated this Fiscal Year will allow us to continue construction on these important measures. Last year we provided you a cost summary in a March 13, 2003 letter from Brigadier General Temple. As requested by your staff, I am providing an updated cost summary for current and upcoming work. An updated cost summary is enclosed.

Before I summarize the updated cost, I would like to provide you with some background on the project and the associated costs. Our original estimate for the project was \$23,500,000 as documented in the Dam Safety Report and in the PCA signed in May 2002. Based upon the favorable bid of the contractor selected for the project, the estimate was revised to \$17,500,000 as documented in last year's summary. This revised estimate did not include the cost of the design and construction of spillway gate repairs as directed in the Fiscal Year 2004 Energy and Water Appropriations Act.

Our current work in Fiscal Year 2004 will include the continued construction of the secant cutoff wall. Our construction contractor is expected to resume work at the site in early April 2004. Work will continue for the rest of the year. In addition to the secant cutoff wall, we will also be designing the repairs for the spillway gate. The construction of the spillway gate will take place in Fiscal Year 2005.

The construction of the mitigation work originally scheduled for Fiscal Year 2003 was postponed until Fiscal Year 2004 in agreement with interested agencies within the State of Vermont. The mitigation work was delayed as modifications to the existing water control plan are currently being considered by the State. A decision on the water control plan is not expected from the State until June 2004. Once that decision is made we will finalize the mitigation plans as they are dependent on the water control plan. The construction of the mitigation features is now scheduled for Fiscal Year 2005 using funds that are to be carried into next year.

It is estimated that \$3,000,000 will be needed in Fiscal Year 2005 to complete the project along with the funds being carried over from this year. Approximately \$1,000,000 will be needed for the spillway repairs and \$2,000,000 will be used on completion of the secant wall. This will bring us to a total of \$20,900,000 for the project.

Please keep in mind that the secant cutoff wall involves subsurface construction in the dam that has a high degree of uncertainty. The river gorge beneath the dam consists of a complex arrangement of large rock slabs surrounded by loose sand, gravel, boulder deposits, and open voids. Although extensive exploratory borings were completed during the design to define the internal conditions of the dam, the potential exists that we will encounter areas that are different than what we expected.

The uncertainty of the subsurface conditions, coupled with the extreme depth of the required cutoff wall, requires the use of drilling technology that has not previously been used in this type of dam repair work. To assure that the dam is not damaged by the construction activities, it is necessary to execute the work with caution, and to adjust the construction methodology as the work progresses. The most difficult subsurface conditions are yet to be encountered, and it is very possible that further adjustments will be necessary. Some of those adjustments may slow the rate of construction thereby increasing the final contract cost.

My staff will keep you apprised as our work continues this year and I look forward to continued coordination with you.

Sincerely,



John B. O'Dowd
Colonel, U.S. Army
District Engineer

Encl

3/23/2004

WATERBURY DAM SUMMARY OF CURRENT SCHEDULE AND FUNDING

CONSTRUCTION ITEM	COST	START DATE	COMPLETION DATE	WORK DESCRIPTION	FY00-01 FUNDS	FY02 FUNDS	FY03 FUNDS	FY04 FUNDS	FY05 FUNDS
DAM SAFETY REPORT AND DESIGN WORK	\$3,700,000			CUMULATIVE FUNDING PROVIDED IN FY00, FY01 & FY02	\$2,600,000	\$1,100,000			
CONDUIT WORK	\$4,900,000	Jul-02	Dec-02	EXCAVATE AROUND CONDUIT, INSTALL FILTERS AND BACKFILL, INSTALL WORK PLATFORM		\$2,900,000	\$2,000,000		
SEEPAGE PUMPS	\$1,300,000	May-03	Jun-04	DRILL WELL PILOT HOLES, DEVELOP THE WELLS, INSTALL PUMPS, INSTALL PIEZOMETERS			\$1,300,000		
CUTOFF WALL*	\$9,500,000	Aug-03	Feb-05	MOD/DEMOL SUPERTOP DRILLING RIG, DRILL SECANT TEST PILES, INSTALL SECANT WALL, RESTORATION OF DAM EMBANKMENT AND STOCKPILE AREA AND DEMOB			\$2,000,000	\$4,500,000	\$2,000,000
MITIGATION	\$1,000,000	Jun-04	Oct-05	DESIGN AND CONSTRUCTION OF SHORELINE STABILIZATION PROJECT. PUSHED BACK TO FY05 DUE TO POSSIBLE CHANGES IN WATER LEVELS PROPOSED BY VERMONT.				\$1,000,000	
SPILLWAY REPAIR DESIGN AND CONSTRUCTION	\$1,400,000	Apr-04	Oct-05	DESIGN OF SPILLWAY REPAIR INCLUDING PLANS AND SPECS AND CONSTRUCTION CONTRACT				\$400,000	\$1,000,000
POST CONSTRUCTION MONITORING	\$100,000		2005/2006	POOL REFILL AND PREP O&M MANUAL. EXTENDED TO 2006.				\$100,000	
	\$20,900,000			PROJECT IS COMPLETED IN 2005 AND WATER LEVEL IN RESERVOIR IS RESTORED IN 2005.	\$2,600,000	\$4,000,000	\$5,300,000	\$6,000,000	\$3,000,000

Italic notes indicate changes from previous funding summary

* Increase cost on secant cut off wall construction is based upon actual progress and placement in FY 2003. Changes due to test cores, construction delays, and changed conditions are expected to increase overall cost. Additional changes could occur during FY 2004.

Note: Up to \$1,900,000 in FY 2004 funds will be carried into FY 2005 to be used with a FY 2005 appropriation to complete the secant wall, mitigation, monitoring, and spillway efforts.

Senator JEFFORDS. The total project cost is about \$21 million. We have appropriated \$18 million to date. Yet, the President's fiscal year 2005 budget proposes to cancel the Waterbury Dam project and to move the money that Congress specifically appropriated to that project to others.

Can you explain to me why the Administration apparently believes that protecting the lives of 10,000 Vermonters and preventing almost \$300 million in flood damage is not a valuable project?

Mr. Woodley.

Mr. WOODLEY. Yes, sir. Senator, I think that we would have to say that that is a valuable project and that it is work that needs to be undertaken and should be undertaken.

The budgetary recommendation reflects a concern about whether that project is appropriately placed within the mission of the Corps of Engineers institutionally, and nothing more than that. It is not a conclusion as to the beneficial and, indeed, essential nature of the project.

Senator JEFFORDS. Well, from my own knowledge of that particular situation, I would say that probably the amount of water that is behind that dam now is probably well in excess of what it was in the days of that flood. There has been progress made, but it seems to always come to a halt and does not go anywhere. I am deeply concerned about it.

I think the Corps built the dam. How can it be outside the mission of the Corps who constructed it?

Mr. WOODLEY. That is a very good question. Your question is a very, very good question, Senator.

[Laughter.]

Senator JEFFORDS. What does it mean? It mystifies me.

I hope you will come back with an answer.

Mr. WOODLEY. Yes, sir.

Senator BOND. Without objection, so ordered.

Senator JEFFORDS. You have said that there are many needs for the Corps. Yet, the Administration has not proposed the Water Resources bill since taking office. Is the Administration going to support a WRDA bill this year?

Mr. WOODLEY. Senator, I think that the Administration, as of right now, has no position on whether to support or not.

Whatever the bill—

Senator JEFFORDS. Well, that means right now they are not supporting it; right?

Mr. WOODLEY. We have a position on a House bill that indicated that we had considerable concerns with the bill, but we would be anxious to work with the House to go forward on legislation. But as of today, we are not supporting a bill.

Senator JEFFORDS. That is bad news.

My time is up. All right. Thank you, Mr. Chairman.

Senator BOND. Sorry, Senator; we are going to submit all these questions for the record.

I think you had a good questions for the record. I would like to welcome you to the Repair-70-Year-Old-Facilities Club.

We will make you a charter member of that. I like historic relics, but not when they are major waterways projects.

Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman. Thank you for allowing me to participate in this hearing.

I would like to make my full statement a part of the record.

Senator BOND. Without objection, so ordered.

[The prepared statement of Senator Allard follows:]

STATEMENT OF HON. WAYNE ALLARD, U.S. SENATOR
FROM THE STATE OF COLORADO

Thank you, Mr. Chairman. I appreciate that you have allowed me to participate in today's hearing. While I am not a member of the Transportation and Infrastructure Subcommittee, the content of this afternoon's hearing is of great interest to me. I am especially interested to learn more about water supply infrastructure and the roll of the Corps of Engineers in providing such projects to communities who are struggling to build adequate water systems. As the Committee moves forward with the Water Resources Development Act of 2004, I look forward to working with you and my colleagues on the Committee.

The mission of the Corps is, in part, to provide quality, responsive engineering services to the Nation. Such services include planning, designing, building and operating water resources and other civil works projects and providing design and construction management support for other Federal agencies. I find this mission compelling, especially given the historical needs of the arid West, whose cities are desperate to find safe, clean and abundant sources of water. In Colorado, Corps projects have provided both opportunity and promise, as well as sound environmental stewardship in some of the most sensitive ecosystems in the country.

As you are aware, I have been recently working with the Corps of Engineers on a project known as the Arkansas Valley Conduit, which is a pipeline that will provide the small, financially strapped towns and water agencies along the lower Arkansas River in Colorado with safe, clean, affordable water.

Projects like the conduit are familiar to the Corps, which first got involved in water supply in the 1850's, when it built the aqueduct that still serves Washington, DC, and some of its suburbs in Northern Virginia. Today, it continues to operate the aqueduct and the two water purification plants it feeds; the water then flows into local systems. Cities and industries across the Nation tap into Corps reservoirs to meet municipal and industrial water supply needs; and today the Corps' reservoirs supply water to nearly 10 million people in 115 cities. In the drier parts of the Nation, water from Corps reservoirs is also used for agriculture.

The Arkansas Valley Conduit, which was first authorized by Congress in 1962, will deliver fresh, clean water to dozens of valley communities and thousands of people along the river. To be exact, the Conduit will supply 16 cities and 25 water agencies in Bent, Crowley, Kiowa, Prowers, Pueblo and Otero counties, with water when completed. In short, the Conduit will serve a geographic area slightly larger than the State of New Hampshire with desperately needed clean water.

I believe the Corps is an organization committed to its mission. It is extremely important that the Water Resources Development Act move forward with expediency and that the members of this committee, through the WRDA authorization, will continue to allow the Corps an opportunity to build upon its legacy of constructing critical components of our national water infrastructure and water supply systems.

There are several other projects that I look forward to working on with the Committee and the Corps. I have submitted these projects to the Committee and look forward to discussing them with you all in the near future. But for now, I hope my colleagues as well as the Army Corps of Engineers will leave this committee hearing today with a keen understanding of the importance that the Corps' water supply legacy, a legacy dating to the 1850's, will mean to me as the bill moves forward.

Thank you, Mr. Chairman.

Senator ALLARD. I would like to address this to the panel.

As you are aware, I have recently been working with the Corps of Engineers on a project known as the Arkansas Valley Conduit which is a pipeline that will provide the small, financially strapped towns and water agencies along the lower Arkansas River in Colorado with safe, clean, and affordable water.

Projects like the conduit are familiar to the Corps which first got involved in water supply in the 1850's when it built the aqueduct that still serves Washington, DC and some of its suburbs in Northern Virginia. This aqueduct is going to provide water supply for some 16 cities, some 25 water agencies, and an area that is a little bit larger than the State of New Hampshire.

The question is: The Arkansas Valley conduit, which is a pipeline that would deliver safe and clean affordable water to the citizens of Southeastern Colorado, would you care to share with me some other examples of water supply projects that the Corps is working on that may be similar to the conduit, and that are either authorized or currently under construction?

General FLOWERS. One moment, sir.

Senator ALLARD. Maybe or just one or two. It does not have to be a complete list, and then after the hearing you can supply the complete list to the committee and to our office.

We would appreciate that.

General FLOWERS. We would be happy to do that.

We have projects, sir, that we have done with water supply as key components in Southeastern Kentucky, and West Virginia. I would submit a longer list for the record.

Senator ALLARD. I would appreciate that very much. I think that is a good start. Thank you.

Senator BOND. Without objection, so ordered.

Senator ALLARD. The second question is this. It is my understanding that the Corps has authority in several States, including the State of New Mexico, to assist with the design and construction of publicly owned water-related infrastructure and resource development and protection projects. The assistance is for such projects as waste water treatment and related facility water supply, conservation and related facilities, storm water retention and remediation, environmental restoration, and surface water resources protection development.

Would you mind explaining a little more about this program and the successes you have had with it?

General FLOWERS. Sir, we have, from time-to-time, been given authority by the Congress to do projects in conjunction with local municipalities and counties. One that I had an opportunity to visit not too long ago was in Charleston, SC, where we have done work directed by Congress with the city there on out-falls on water works, et cetera.

Again, I would submit a longer list of where we have done this for the record, sir.

Senator ALLARD. Good. I will submit all these questions to you for a little more detailed question. If you would provide that to the committee and to our office, we would appreciate that. Thank you.

General FLOWERS. Yes, sir.

Senator BOND. Without objection, so ordered.

Senator ALLARD. I appreciate all your work at the Army Corps of Engineers, and would second Senator Reid's comments.

I am interested to learn more about the working relationship between the Corps of Engineers and the Bureau of Reclamation. Would you please cite examples of projects where the Bureau and the Corps have worked together and how the relationship has been

structured so that management of the Bureau and Corps projects are coordinated?

General FLOWERS. Sir, we have established agreements and partnerships with every Federal Agency that deals in the water area. We have made it a major point of emphasis for my time as Chief of Engineers to sign memorandums and partnership agreements with other agencies.

The Bureau, having a very similar mission to the Corps of Engineers, is a very valued partner. We have worked very closely with the Bureau on the American River in California.

I think that probably would be the best example. There are dams there that have been constructed by the Corps of Engineers and that are now operated by the Bureau of Reclamation.

Senator ALLARD. Thank you for your response.

Mr. Chairman, I see my time has expired. Thank you.

Senator BOND. Thank you very much, Senator Allard.

Now we turn to Senator Wyden.

Senator WYDEN. Thank you, Mr. Chairman.

I also note that General Strock is out in the audience.

We have appreciated the help that you have given us in the Pacific Northwest. You have been very gracious and understand our issues. I look forward to your position as the new chief of engineers.

If I could, General Flowers, we are concerned as you probably know in the Pacific Northwest about the remote operation of the dams. I was curious if you were familiar with the experiment of eliminating skilled operators at the Flat Iron facility in Colorado. Have you followed that?

General FLOWERS. Sir, I am not aware of that one.

Senator WYDEN. Well, there was a pretty serious explosion there in December 1995. The news report said,

"The force of the explosion lifted 10,000 pound hatches."

It was a pretty forceful explosion. I guess what we are concerned about, both during the recent East Coast blackout and the recent Flat Iron plant situation, it seems to us that we ought to be maintaining as many people onsite as we possibly can with training in order to deal with these kinds of safety issues. Would you agree?

General FLOWERS. Sir, I do.

Senator WYDEN. Well, given that, why is the Corps pushing forward with proposals to have remote operation? I just asked you about the Colorado situation. I broadened it out to address what is going on in the East Coast of the United States. But it seems to me that in the Colorado and the East Coast situations, there is a parallel. Yet, in spite of the concern, to your credit, you have said, "It is serious, it looks like we going ahead with remote operation."

Are you willing to take another look at that and try to make sure that we do not go forward in the Northwest with a proposal that I think that has been risky both for the East Coast of the United States and for what happened in Colorado?

General FLOWERS. Yes, sir; we will take a very hard and thorough look at that. I share your concern with having an unmanned facility and for the safety of the public.

Senator WYDEN. I appreciate that because I think the combination of those three situations really warrants that you all take a fresh look at it.

General FLOWERS. Sure.

Senator WYDEN. The only other thing I would like to do, Mr. Chairman, is this. There has been great concern at one of our communities, Columbia Gorge Community College, with respect to the training of individuals who would be running the power grid. They have had some excellent programs there and would like to be part of an effort to work with you all in the future.

Chairman Bond, given the shortness of time, I would just like to submit for the record a number of questions that deal with education and training as it relates to a number of our community colleges that would like to work with the Corps.

With your unanimous consent, I would like to pose those in writing. That would be very helpful.

Senator BOND. Senator Wyden, we will have opportunities to ask questions. I would not want our witnesses to feel that they are being slighted. So we will have questions.

Senator WYDEN. Very good.

Senator BOND. We would ask all the witnesses, if they could, within a week to try to respond to the questions. We thank you for submitting them.

Without objection, so ordered.

Senator BOND. We are hearing some unfortunate news about the highway bill in the House. That is why we are trying to find out what is happening.

Senator WYDEN. Good luck on that one, too.

[Laughter.]

Senator BOND. All I know right now is that it does not look good. That is the bad news.

Senator Graham.

Senator GRAHAM. While the panel is still within earshot, I would like to add to the several people who have spoken positively about your work. I am particularly impressed with what is happening in the Everglades. It is a mammoth and extremely complex project and it is being handled with the highest level of professionalism. I congratulate you on that.

Finally, and this may relate to your comment about the highway bill, we have just heard from the General that in 1990, our inland waterway was a C. Today it is a D. And by the year 2010, he projects it will be an F. You could give the same grades to almost every area of America's infrastructure. We have passed success transportation bills which, if nothing else, have guaranteed that the transportation system will get worse in America.

We have to get serious about this infrastructure. We talk about all kinds of deficits—budget deficits, trade deficits. We have a horrendous infrastructure deficit. This committee has a front row seat in responsibility to do something. I hope that we will start with this.

Senator BOND. I appreciate your comments, Senator Graham. That is what we intend to do, because this is a tremendous need.

I would join in the very kind words that you have said about General Flowers. We have appreciated very much his great leadership. We wish him well.

Mr. Woodley, thank you very much for your testimony.

There will be additional questions coming for the record.

Without objection, so ordered.

Now we have a very interesting panel. We would like to call up the Honorable John T. Myers, a former colleague, who will be testifying on behalf of the National Waterways Conference.

We have Derrick Crandall, president of the American Recreation Coalition; Mr. Steve Levy, county executive of Suffolk County, NY; Michael Leone, chairman of the American Association of Port Authorities; William G. Howland, basin program manager, Lake Champlain Basin Program; and Michael Cameron, Desert Rivers program director of the Nature Conservancy of Nevada.

There will also be testimony included in the record of Mr. George Grugett, executive vice president of the Mississippi Valley Flood Association.

Without objection, so ordered.

We will ask our witnesses to take their seats. As I indicated, your full statements will be made a part of the record. We ask that in order to get all of this testimony and the questions in this afternoon, if you will try to keep your oral presentations to 4 minutes, it would be very helpful. Then we can get into a round of questions.

With that, I will call first on Congressman Myers.

**STATEMENT OF HON. JOHN T. MYERS, ON BEHALF OF THE
NATIONAL WATERWAYS CONFERENCE, PUNTA GORDA, FL**

Mr. MYERS. Thank you very much, Mr. Chairman, and members of the committee. Coming here in this position is a little bit different. I spent hundreds of hours on that side of the dais and coming now a few times on this side, I know just how we are pushing for time here and how often that happened.

But you know, just sitting here, I was thinking. History has a way of repeating itself. How many times I have heard this story about how we have never had enough money, or it was not the right time to do what needed to be done. How many times, both Democrat and Republican Administrations I have served with, there was never was enough money allocated by the budget process to adequately fund the Corps of Engineers and the job they had to do. Their hands were tied.

I thought of the O&M, the Operation and Maintenance, and maintenance particularly. I have gone back and reviewed some of the projects that we undertook in this year and how we neglected not spending the amount of money on maintenance that we should have spent. It is like being pound foolish and dollar wise. We just did not have enough votes to get the job done.

I know you are going to hear this same thing. I am glad to hear that you are going to get WRDA out, hopefully by Memorial Day. I hope you are right. I certainly know it is needed. I was encouraged also about the Upper Mississippi. I farm in Indiana and I spend my winters in Florida. I have the best of two worlds.

Senator GRAHAM. We have a wise man before us.

Mr. MYERS. I have the best of two worlds. But nevertheless, I am a farmer in Indiana also. If you can get the corn prices up in the Upper Mississippi, why it is going to help all of farmers and help our country in balance of trade and all these things.

Senator BOND. Corn beans, Florida rotation. CBF.

Mr. MYERS. That is true. I remember in 1986 the WRDA bill that year, we opened up what they called the use tax, a 20 cents fuel tax be put into a trust fund to help get enough money to do the job that we just did not have enough tax money to spend. Jim, you remember, you were there. I voted for it.

I caught a lot of thunder from the water users that it was a use tax and they could not afford it. The railroads did not have to pay it. It helped for a long time, several years. Now we have run into that same obstacle once again.

We do not have enough tax dollars. What concerned us that last week when my friends back in the House on the Appropriations Committee, they have the right idea, balancing the budget. I could not disagree with that.

But at whose expense? That is what I want to urge upon you. It takes courage, I know, because the media is going to come back and say, "Well you are building locks and dams for rich people that run their ships up and down. They are luxury liners. They are going to tell you that their boondoggles are going to be pork barrels for your State or for your congressional district."

I always ran into that problem. So it takes courage to do the job that you are going to have to do. It is going to take courage. But we are on the right track. The Corps has done a great job on a limited amount of funds. But they deserve the best. You can give them guidance.

One other thing. I have highlighted in my statement three or four things I think are most important. Everything is important, I think. One of the criteria is that I think we need to clarify the definition of what is a distinct group of animals or plants. The species is distinct. What is it? I think you should ask that the National Academy of Sciences should put out a ruling: What is the distinct definition of a species?

I remember one time in Tennessee years ago we had a waterway project. It was held up for 2 years because of a particular snail darter. Nobody knew what a snail darter was.

Do you remember that, Jim? We went through that. We held up that project for over 2 years.

I recall visiting the Supreme Court when the proponents brought in five vials of a snail darter. It was a little dinky fish like that. But what happened is that they brought those five vials in and the opponents of the snail darter brought their expert in, a professorial type from a university. They asked him to define which one of those five specimens was a snail darter. The expert picked the wrong one. So I think you have to certainly help alleviate the problem by asking the National Academy of Sciences to do something about that, and to define what a species is.

I appreciate the opportunity to come back and visit with you. You are doing a great job. I hope you are right. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Senator BOND. Thank you very much, Congressman Myers.
Mr. Crandall.

**STATEMENT OF DERRICK CRANDALL, PRESIDENT, AMERICAN
RECREATION COALITION, WASHINGTON, DC**

Mr. CRANDALL. Thank you, Mr. Chairman, and distinguished members. I am delighted to appear here today on behalf of the recreation interests in this country and to underscore the importance that the Corps plays as a tremendous provider of recreation. In fact, it is the No. 1 provider of recreation among all Federal Agencies. As you may know from the results of a national study on recreational lakes, there are 1,800 man-made federally managed lakes providing some 900 million recreation visits every year, and directly accounting for \$44 billion worth of activity.

What I would like to do today is talk just a bit about the difficulties that the Corps faces in doing what has been a wonderful job in providing recreation. I would also emphasize that we are beginning to recognize the true value of recreation, not just from an economic standpoint, but also from a standpoint of our physical health.

We recognize that today some two-thirds of all Americans fail to get the Surgeon General's recommended level of physical activity. The Corps' lands and waters are a marvelous opportunity to engage in recreation at natural health and fitness centers. We certainly encourage continued use of these areas.

The National Recreation Lakes study commission identified the fact that the Corps had a billion dollar backlog in the recreation facilities that now exist at Corps projects. These are projects that were largely built back in the 1950's and 1960's. Frankly, they are simply worn out. They need new capital investment. They need expansion because the population of the United States has increased dramatically since that time.

We come here today saying that that investment needs to be made to provide continued quality recreation experiences, but it does not have to come through huge increases in Federal expenditures. In fact, through a combination of use of programs that this panel has, in fact, created, things like the Wallop Road Trust Fund, and Scenic Byways, the Recreational Trails Program, and more, and the investments that the States can make on Corps projects through fees and through partnerships. We have a wonderful opportunity to continue the tradition of outstanding recreation opportunities on public lands and public waters.

My testimony goes into some depth about the opportunities to look at some of the new and innovative partnerships that could be undertaken. One thing that is absolutely certain, the Fee Demonstration Authority that now exists for the retention of fees in national parks and national forests of the Bureau of Land Management and the Fish and Wildlife Service needs to be provided to the Corps of Engineers. It makes no sense to collect fees at Corps campgrounds and at boat ramps, and not allow those fees to be retained and used to operate those facilities.

But there is more that needs to be done. We have outlined a series of innovative steps that could be undertaken in partnership with State and local governments and the private sector that would

involve potentially billions of dollars of investments in sorely needed recreation facilities.

We believe that those kinds of investments will ensure that the Corps continues to be a large and important provider of recreation.

I would end by simply underscoring the promise of an experience of Chicago in the mid-1990's. The Chicago lake front had become a serious financial challenge to the city.

Demand for boat slip rentals was extremely high, as was other lake shore activities, but lake shore activities became a \$2 million drain on the city's park and recreation department.

However, through turning over the lake shore operations to a seasoned management company, skilled in operating marinas, the city and this company developed a reinvestment strategy. Fifty-two million dollars was invested. As a result, in less than 4 years, a complete turnaround had been made. That lake shore is now generating \$11 million in positive cash-flow, which even after enhanced operations along the lake shore, provides \$6 million in annual subsidies for the city to use for a variety of recreational programs, including a marvelous sailing program for handicapped youth.

Thank you very much. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you, Mr. Crandall. That certainly is an interesting example.

Senator CLINTON. Mr. Chairman?

Senator BOND. Yes?

Senator CLINTON. Mr. Chairman, if I might, I would just take the opportunity to introduce Executive Levy to you. He has been elected to serve as the Suffolk County Executive. He took office in January and has a tremendous record of public service and a deep interest in these issues. I appreciate the committee's invitation to have him here today.

Senator BOND. Thank you very much for the introduction, Senator Clinton.

Mr. Levy.

STATEMENT OF STEVE LEVY, COUNTY EXECUTIVE, SUFFOLK COUNTY, HAUPPAUGE, NY

Mr. LEVY. Thank you, Chairman Bond and Senator Clinton for the kind invitation. I am the county executive of Suffolk County on Long Island in New York, with a population of 1.4 million. It is the largest suburban county within the State.

As the county executive, I am dealing with issues ranging from police departments, to community colleges to budget deficits, to ethics reform.

But this issue, shore line protection, will have a more profound impact on future generations than all of those other issues combined. Our shore line defines Long Island. It is what makes Long Island, Long Island. We are at a critical crossroads right now. Decisions are going to be made within the next 2 years which will have historic implications.

My children and grandchildren 50 or 100 years from now are going to look back at this year, 2004, as being either the year where the Federal Government continued its commitment to pre-

serving the beaches that they hopefully will enjoy, or they will look back at 2004 as being the year that the Federal Government reversed its commitment and allowed those beaches to simply disintegrate.

I am here to say that in the past we have always been able to count on the Federal Government as we look into the future, as the Senator had stated. But we are looking here at a seismic shift in Federal policy.

Just a couple of days ago, Senator Clinton and I were in a helicopter along the South Shore of Long Island. When you look down, you see the strip of Long Island which runs parallel to the mainland of Long Island. You see the rough shores of the Atlantic Ocean pounding on Fire Island.

In between Fire Island and the main land you see this great body of water called the Great South Bay. You see how calm it is. Because it is so calm and you have this barrier reef, it is allowed for us to develop a tremendous shellfishing industry which would be gone without this replenishment. It has allowed us to have recreational boating for millions of people within the metropolitan area. And most importantly, it has allowed us to have a flourishing tourist industry. The biggest part of our economy on Long Island is our tourist industry. It will be wiped out if we do not have this further commitment to shore line preservation.

As Senator Clinton said, we have come far. We have spent \$30 million on this project already. We just need about \$2 million this year and maybe \$2 million next year to complete the project. It is like running a 26-mile marathon and stopping after the 25th mile. We need to proceed.

With this study we will be able to look at things such as protecting our beaches, preventing flooding of our homes in the area, protecting natural habitats, providing for greater public access, building up our dunes, and creating greater navigational safety for our boats.

I want to say one final thing because it is not just a matter of having the study. It is what you do with the study thereafter. We need the money to proceed to make sure we are moving forward with the preservation of our shore line.

Within this budget, we would be cut to the point where right now we put in about nine or 10 percent of the total share.

Hereafter we in the local level would have to put up to 30 percent of the total share of beach restoration and all the other monies that go into this overall project. It is not sustainable. We cannot do it. We would be wiped out. That is why we are here for your help.

I have never come so far to speak for just 4 minutes, but it could be the most important 4 minutes of my tenure as the county executive. We ask for your help. We thank you for your consideration. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Levy. We think the 4-minute limit is a driver of eloquence.

[Laughter.]

Mr. Leone.

**STATEMENT OF MICHAEL LEONE, CHAIRMAN, AMERICAN
ASSOCIATION OF PORT AUTHORITIES, ALEXANDRIA, VA**

Mr. LEONE. Mr. Chairman, and distinguished members of the committee, I am Mike Leone. I am the chairman of the American Association of Port Authorities and a port director of the Massachusetts Port Authority. I am testifying today on behalf of AAPA's 82 public port members.

This Nation has been served well by regular authorizations of the Water Resources Development Act. There is a critical need for Congress to return this legislation to its biennial cycle.

With WRDA 2004, this committee can significantly refocus water resources policy in this Nation. As this committee is well aware, deep draft ports move more than 95 percent of U.S. overseas trade by volume. On average, each State relies on between 13 to 15 ports to handle 95 percent of its imports and exports.

Public ports also play a critical role in the mobilization, deployment, and resupply of U.S. military forces. Public ports provide 13 million direct and indirect jobs and port users contribute approximately \$200 billion in Federal, State, and local taxes. Of this amount, \$16 billion is generated directly in U.S. Customs duty revenues on imported goods.

Public port authorities make substantial investments in the Nation's port and harbor infrastructure. Next year alone, port authorities will invest \$2.2 billion, nearly twice as much as they did in 1995. This rate of increase closely matches the growth rate for containers moving through our ports, which is doubling every 10 years, as illustrated in this chart we have.

Ocean carriers are responding to this increased demand in trade by building larger vessels. These vessels require deeper navigation channels, which can only be achieved through significant contributions from both Federal and local project sponsors.

However, funding for the Corps Civil Works Program has decreased by 50 percent in the last 30 years. The Corps primary responsibility must be to keep the Nation's navigation channels open and navigable. AAPA urges the committee to ensure that the Corps' navigation mission receives your highest priority in this year's WRDA.

Construction and maintenance needs of the Nation's navigation system are simply not being met. As shown on the chart, spending on navigation is barely higher than 10 years ago. AAPA estimates that deep-draft projects needs approximately \$500 million for construction and \$735 million for operations and maintenance in fiscal years 2005.

The Harbor Maintenance Tax is dedicated toward funding the Federal share of operation and maintenance costs. Yet, the Administration's fiscal year 2005 budget proposal estimates that the surplus in the Harbor Maintenance Tax Trust Fund will grow to more than \$2.6 million, while providing only \$600 million in O&M funding. If this surplus continues at its current pace, it will likely reach \$5 billion by the end of the decade, as illustrated in the chart.

On behalf of AAPA, I urge this committee to authorize guaranteed funding of the trust fund, ensuring that funds collected are spent for their intended purposes similar to the Highway Trust Fund. AAPA believes sponsors are providing a greater share of the

cost of navigation channel deepening than Congress expected when it mandated cost sharing in 1986.

AAPA urges the committee to consider seven proposals to modernize the Corps, improve its relationship with local project sponsors, and more efficiently manage the Nation's water resources. These proposals are laid out in my submitted testimony.

AAPA is working to improve our industry's partnership with the Federal Government. Specifically, AAPA has recently launched a quality partner initiative with the Corps and at AAPA's recent conference, I signed a memorandum of understanding with Secretary Woodley to improve these efforts.

In conclusion, Mr. Chairman, AAPA looks forward to working with the committee to modernize the Corps of Engineers, and address funding shortfalls for the development and maintenance of the deep-draft navigation system. The benefits will be increased trade, meaningful economic impact on communities all across the country, and more jobs for hard-working Americans. AAPA appreciates your leadership on behalf of the U.S. port community.

Thank you. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Leone.

Senator Jeffords, you had already mentioned our next witness. Did you want to say anything else with respect to Dr. Howland?

Senator JEFFORDS. No.

Senator BOND. All right. Then I will let his previous comments and my brief introduction stand.

Dr. William Howland.

STATEMENT OF WILLIAM HOWLAND, BASIN PROGRAM MANAGER, LAKE CHAMPLAIN BASIN PROGRAM, GRAND ISLE, VT

Mr. HOWLAND. Thank you, Chairman Bond, and distinguished members of the committee. Thank you for inviting me here to testify about the important role of the Army Corps of Engineers in managing our Nation's water systems.

Our Lake Champlain Basin Program is an international partnership to restore water quality and to improve the economy of the Lake Champlain Basin. Our partnership involves the States of New York and Vermont, the Province of Quebec, and numerous Federal Agencies, including the Environmental Protection Agency, the Department of Agriculture, the Department of the Interior, and the Army Corps of Engineers, and public stakeholder groups.

Cleaning up pollution in a lake is exceedingly difficult and expensive. It always includes interrupting the flow of pollutants into the drainage system to prevent further contamination. Pollution prevention requires changing the way that things work in the landscape that drains into the lake.

Lake Champlain, as in the Great Lakes and other parts of the Nation, ecosystem restoration efforts often require advanced engineering design, expertise, and leadership that communities and States simply cannot provide.

The competence and the engineering expertise of the Army Corps is a vital resource for planning, designing, and executing restoration plans. In the Lake Champlain watershed, with the Corps' sup-

port, an infestation of water chestnut, which is an invasive aquatic plant that has dominated the entire southern part of the Lake for years, is now nearly under control. This summer we expect to begin work on projects to intercept storm water runoff into Lake George in New York, part of the Lake Champlain ecosystem, and also to stabilize eroding stream banks in the watershed in Vermont.

The role of the Army Corps' Environmental Restoration Authority is a vital nationwide asset, getting projects done and done professionally, dam removable projects, wetlands restoration, fish passages, and stream bank stabilization to restore degraded ecosystems. They strengthen our Nation's economy and they ensure that we will be providing clean drinking water to our citizens.

One of the greatest restoration projects in the history of the Nation is underway in the Everglades and South Florida with Army Corps leadership. From Texas to Mississippi in the Louisiana Coastal Area Ecosystem, wetlands are disappearing at the rate of 22,000 acres per year. The Army Corps is a partner with the State of Louisiana on a study that will enable us to better understand this problem and how to mitigate and minimize the losses.

There are similar case histories and projects, large and small, across America, and accolades from the communities in which the Corps is working. America today faces unprecedented challenges of ecosystem damages and a decline in groundwater quality, weed infested waterways, and polluted lakes and estuaries. These problems have compromised drinking water supplies for millions of Americans, caused desperate struggles for survival in the tourism and recreation industries, and they have created an alarming trend toward more and greater problems in the near future.

The Corps of Engineers is a vital part of our service.

It works in our homeland to bring the best tools in the Nation to guide the problem solving that we need.

Mr. Chairman and members of the committee, I would like to direct your attention particularly to the challenge we face regarding the Corps Continuing Authorities Programs and Sections 206 and 1135. The existing program limits of \$25 million each have simply not kept pace with the current needs that we have and that are now a fraction of what America needs them to be. In the Lake Champlain watershed this means that several ongoing projects are going to be suspended due to this national shortfall.

Suspending projects mid-stream as we have just heard in other testimony is never a good bargain. It does not save money and it does not avoid expense.

Finally, the work of the Army Corps of Engineers on environmental restoration is not only about conservation philosophy. It is not about environmental ethics only. It is also about our Nation's economic engines. As we know so well in the Northeast, it is about the vitality of the tourism economy and the quality of life that keeps recreation businesses in business. It is about trucks on the highway, and the pulse of commerce in trade. It is about reducing bankruptcies and maintaining jobs. It is about the smell of the tap water in the cities and the towns across the Nation.

I hope the members of the committee will continue to recognize, to appreciate, and to support the vital role of the U.S. Army Corps

of Engineers in service to the American homeland, and in particular will fully support their environmental restoration programs.

I thank you for the opportunity to testify today. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Dr. Howland.

Now we will hear from Michael Cameron.

STATEMENT OF MICHAEL CAMERON, DESERT RIVERS PROGRAM DIRECTOR, THE NATURE CONSERVANCY OF NEVADA, RENO, NV

Mr. CAMERON. Thank you, Mr. Chairman, and members of the subcommittee. Thank you for the opportunity to testify today.

I am Michael Cameron, the Desert Rivers program director for the Nature Conservancy of Nevada.

I am here today to make several recommendations regarding the Ecosystem Restoration Provisions of WRDA. The Nature Conservancy works to preserve the plants and animals that represent the diversity of life on earth.

Because more than half of all species depend on fresh water environments, the Conservancy has formed a partnership with the Corps on major river systems across the country.

Based on our experience with the Corps, I am here to offer three primary recommendations: First, for reasons that have already been detailed having to do with the great need for WRDA across the country, the Conservancy urges Congress to enact WRDA this year.

Second, we urge Congress to raise the funding ceiling for the Corps' Continuing Authorities Program, Sections 1135 and 206, Ecosystems Restoration Programs, from \$25 million per year to \$100 million, and individual project ceilings from \$5 million to \$10 million. The CAP programs are delivering cutting edge projects, but financial demand nationally currently exceeds authorized levels by a ratio of two-to-one.

Third, allow credit for early implementation of ecosystem restoration features. The Corps currently has authority to credit non-Federal sponsors for early implementation of flood walls, levys, or other features that reduce flood damages. It is an anomaly that similar crediting is not allowed for ecosystem restoration. Credit for early implementation will result in better projects, delivered more quickly, and at a lower cost to taxpayers.

Fourth, eliminate the unlimited financial liability that non-Federal sponsors assume under the CAP program when the Corps decides unilaterally to continue a project that is over-budget and has exceeded the Federal funding limit of \$5 million.

I will briefly describe two Corps projects on the Truckee River in Nevada that support these recommendations. The Truckee River flow is 110 miles from Lake Tahoe to its terminus in Pyramid Lake in the high desert.

In the 1960's, the Truckee, like scores of rivers in the West, was straightened, walled, and channelized for flood control. One major unintended consequence was the loss of 75 percent of the River's biological richness, as measured by lost species, forest canopy, and water quality. More recently, in 1997, a 100-year flood caused an

estimated \$600 million in damages to the local economies of the cities of Reno and Sparks.

Two Corps projects are now responding to the local communities' needs for both ecosystem restoration and flood control. The Truckee Meadows flood control project enjoys broad local support for an excellent project. The major local concern, however, is the length of time it is taking to reach implementation.

River restoration is likely to be called for in the final project and for reasons specific to the project, restoration will likely need to be implemented before any other project features. The local sponsors, the cities of Reno and Sparks in Washoe County have both the land and the funding to begin restoration today, but are inhibited by the lack of a mechanism for crediting the work. Were credit allowed, project implementation could be expedited by as much as 2 years, and perhaps more.

The McCarran Ranch, a 1135 project, will restore 5 miles of river downstream of Reno and Sparks. In addition to dramatically improving riparian and wetland habitat, and aiding the recovery of species like the Lahontan cutthroat trout, the McCarran Ranch 1135 project is serving as a model for the restoration strategies proposed under the Truckee Meadows Flood Control Project.

With an earmark from Congress in fiscal year 2004, the McCarran Ranch 1135 project had been on track to begin construction this year. Unfortunately, the financial needs of all of the Corps 1135 projects nationally so far exceeds available funds that the Corps has stopped work on virtually all of their 1135 projects, including McCarran Ranch.

The overall excellence of the CAP program is rendered meaningless when a lack of sufficient funds causes whole projects to start and stop repeatedly. The \$25 million limit on these programs is less than 1 percent of the Corps' annual budget, and should be raised to \$100 million annually.

In sum, the Conservancy recommends enactment of WRDA this year, raise the funding ceilings for CAP programs and projects, and allow credit for early implementation of ecosystem restoration.

Thank you very much. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Cameron.

My thanks to all of you. We will begin the questioning now.

Mr. Crandall, Missouri is very fortunate to have Corps recreation lakes which are extremely important and which I have enjoyed using. You talked about some cooperative partnerships.

Do you think that recreation users would be willing to pay more user fees if the user fees were specifically dedicated to go to the site where the fee is applied? Would this help meet the challenges, or are you citing the Chicago example to suggest that more public/private partnerships would generate resources?

Mr. CRANDALL. Mr. Chairman, there is certainly room for both. There is no question but that boaters and anglers and other recreationists already pay fees in many, many cases.

Certainly I am very familiar with some of the partnerships that exist in your State on Table Rock Lake and others that are marvelous examples of that.

We have not fully capitalized on these partnerships. One comment in my testimony talks about the ability to capitalize on an existing authority, something that the Department of Defense knows a lot about, called NAFI, Non-Appropriated Funding Instrumentalities, and applying that same concept used on bases to operations of Corps of Engineers facilities for recreational purposes.

We believe that with some encouragement by the Congress, more creativity and innovation can be seen out there on the grassroots level and will have a dramatic and beneficial impact. There is no doubt that Americans are not looking for free or cheap recreation. They are looking for good quality recreation. So as long as we retain that focus on providing memorable, valuable experiences, I think Americans are willing to pay more in fees. Recreation is a \$400 billion a year industry as you look at what Americans spend right now out of their checkbooks and their pocketbooks. We certainly do not believe there is an aversion to reasonable fees.

Senator BOND. Thank you very much.

Congressman Myers, I gather what your view would be to say that rather than waiting around while the Corps tries to predict the future, that Congress should step up to its role to shape the future and to make this Nation effective, competitive, and prosperous, such as previous years have been in trying to shape the infrastructure.

I will ask you a rhetorical question. Is it the proper role of Government to encourage competition in providing our producers with multiple shipping options, including water? Or can our country do just fine with highway and rail?

Mr. MYERS. That is an easy question; is it not?

Senator BOND. Do not swing too hard. I do not want you to hurt yourself.

[Laughter.]

Mr. MYERS. Which one do you want me to answer first? I think that we are very fortunate with the transportation system that we have in this country. Back in the first Congress, Congress asked Alexander Hamilton to develop a policy, a plan for the country, a fledgling country here. How could we be competitive in world markets? How are we going to do it?

His suggestion, No. 1, was transportation. We had to develop a transportation system, not one or the other; all of them. Our transportation system, I think, is the best in the world. Now, Europe has a very good water system, and has a pretty good rail system. But our air system, our navigation, our waterways, is growing every year. The bad news is that we are wearing it out. It has been worn out. I think that we cannot say one or the other. We need all three of them. That keeps competition, too.

The Tennessee Valley Authority tells us that barging on the Tennessee Rivers saves \$10.67 a ton.

Senator BOND. They save Missouri farmers on the Missouri River \$200 million a year in shipping costs.

Mr. MYERS. Missouri needs some attention, too. A few years ago I remember flying in, with all the mud and stuff up on the fields. The Missouri and the Illinois River running into the upper reaches of the Mississippi River, a vital part of getting grain out of the Midwest.

Here again, we are having trouble meeting the balance of trade around the world. Agriculture can do a great job, a great job in helping meet that need to balance the trade. We have to get it to the ports, or we cannot sell it.

Senator BOND. Your full statement will be in the record and we will put ribbons on them.

Senator Jeffords.

Senator JEFFORDS. Thank you, Mr. Chairman.

Again, I want to welcome Bill Howland here from the Lake Champlain Basin area.

The Lake Champlain Basin Program in Vermont where you work has led to the cleanup of hundreds of acres of habitat for wildlife and recreation for Vermont and New York. In your statement you describe the type of history that the Corps has with the State of Vermont, the partnership that just now developed and why the Ecosystem Restoration Authorities are the essential component of that partnership.

Mr. HOWLAND. I think, Senator, in past years the Army Corps was known in Vermont, as in many States, for large projects, big dams, grand programs, which were necessary for flood control. They were implemented.

I think the change is that the Corps has a mandate now to be far more responsive to the immediate needs of a State, Vermont and other States as well. The programs that we see now are responsive to some of the problems that were actually caused by some of the earlier Corps activities and by the nature of development over many years.

So instead of large projects, the Corps now is focusing on small grants programs with communities, supporting aquatic nuisance species control in waterways as in Lake Champlain.

New York and Vermont benefit from that. Under Section 542, the Corps is developing with the Lake Champlain Basin Program, a means to implement funding for ecosystem restoration that will really draw on the existing programs of community involvement and State involvement that already have been put together by the Basin Program.

We find a great deal more responsiveness to our immediate needs by the Corps. That is a shift in the pattern of Corps activities.

Senator JEFFORDS. Are these Continuing Authorities Program particularly important for small and rural communities?

Mr. HOWLAND. I believe that they are, Senator. In fact, they are vital. The kinds of programs that are being supported are ones that would simply not otherwise happen. Many of the communities in Vermont and also in upstate New York, which will be eligible for these Corps expenditures under Section 542, these programs will be played out in communities that themselves have relatively few people, but they are part of a watershed that is troubled.

Where the watershed has been compromised where stream bank restoration programs are needed, et cetera, these communities largely say that they land rich and dirt poor.

There is no way that a community can cope with the expenses that they face in cleaning up the watershed or stabilizing the riv-

ers, or controlling the pollutions, the phosphorus or nitrogen that flows in to those rivers without assistance from the corps.

Senator JEFFORDS. There are those who argue that the ecosystem restoration should not even be a part of the Corps mission. Can you comment on that with particular focus on what you hear from the localities in Vermont?

Mr. HOWLAND. Well, Senator, I believe that the Corps of Engineers represents the best tools and the best expertise that we have in the Nation for handling problems associated with our waterways and our drainage systems. I hope that we can continue to bring those tools to the communities and to the tasks that need them so much. So I believe it is an appropriate part of the Corps mission.

Ecosystem restoration is always an essential investment in our future. We live in a time where the price of gasoline is \$1.70. The price of a bottle of drinking water downstairs is about twice that. If you think about that, we all need that water. Our children depend upon it. I think this is a good place for the Corps to invest its energy and for the Federal Government to show the leadership that we need.

Senator JEFFORDS. I see my time is up. May I ask one more question?

Senator BOND. Certainly. We will give you a Mulligan.

Senator JEFFORDS. I will switch to Mr. Cameron, if that is all right.

Mr. Cameron, one area that I am particularly interested in is water quality and the degree to which urban storm water runoff plays a role in altering habitat and harming ecosystems. Can you speak a little about your experience in Nevada in dealing with some of the harmful effects of storm water runoff?

Mr. CAMERON. Well, it is critical issue in our community. Reno/Sparks is a community of 350,000 people, much of it developed in the flood plain right along the river. We are in an arid region of the country, so we do not have a lot of flow by Eastern standards. The runoff that does come off the hardened surfaces has a great impact on the Truckee River.

To the extent that the local governments, the Cities of Reno and Sparks in Washoe County have developed a multi-agency effort and a regional storm water quality management plan. It has been vigorously pursued and is being implemented and is seen as one of the top priorities for watershed protection for our river system in Nevada.

Senator JEFFORDS. Thank you.

Thank you, Mr. Chairman.

Senator BOND. Thank you very much, Senator Jeffords.

Senator Clinton.

Senator CLINTON. Thank you, Mr. Chairman. I want to thank all of the witnesses. Each of you has really contributed to the discussion about how we move on these important issues. I share your concern about the water of our Nation in every respect because of the implications that we could very well face all kinds of pressures on our water systems that are even greater than what we currently see today. We are falling behind in what we are trying to do. We can fall even further behind with the pressures of tomorrow.

But I wanted to ask Executive Levy a question. If the President's budget proposal is adopted, and the Fire Island to Montauk Point Reformulation Study is not funded, what do you think the negative impacts would be on Suffolk County?

Alternatively, if the study goes forward, what could be the positive impacts?

Mr. LEVY. Thank you for the question, Senator. The consequences can be dire in many ways. There is life at stake here as well. There have been instances where recreational boaters and fishermen have lost their lives trying to navigate the very rough inlets because we are not taking proper care through dredging and other important mitigating measures.

Of course, we mentioned a little earlier about our tourist industry. Just to give you an idea of how expensive this is, it is estimated that we derive revenue anywhere from \$175 million to \$250 million a year from tourism, a large component of which is our beautiful beaches.

Anytime you see that is put together of the world's best beaches, not just the Nation's, but the world's beaches, you have the Riviera, you have Honolulu, and you always have a beach from Long Island on that list. That is not going to be in the future if this plan does not progress.

We have 160,000 boats on the Long Island shore. We have over 150,000 homes that are impacted, that can be flooded if we do not take an overall action plan. So this is not a program here that is designed to put some sand on a beach to protect some rich person's home. This is a plan that has a holistic effect on 1.5 million. Their lives are on the line.

Our economy is on the line. This really is a crossroads in history. We need this program to progress.

Senator CLINTON. I know when we were in that helicopter together, and we were looking down at the very rough waters of the Atlantic there, and then you could see where erosion had eaten away at these barrier islands to the point where some of them were not much wider at certain points than from here across the way to the other side of this dais.

It was shocking to see it from the air. It is one thing to walk the beach, enjoy the water, and go boating, but you see how over time this has really been impacted. I have to applaud the Corps because they have taken this to such a serious extent. They have looked at everything. It is hard to know exactly what to do. Some of the decisions that were made back in the 1960's, it turns out were bad decisions because they did not have the extent of the scientific knowledge that we do today.

I just want to underscore your assessment about what could happen should this study not continue.

Mr. LEVY. And if I could just say, when we were up in that helicopter and we looked down, not only did we see how beautiful the island was, but how vulnerable it was as well, and how thin it was. If we do not take proper precautions, it could be wiped out in a nanosecond. But we can protect it very easily if we just maintain our commitment.

Senator CLINTON. Of course, then you would wash over into the Great South Bay. You would wash up under the mainland and it could have far-reaching economic effects in terms of disaster costs.

Mr. Chairman, I was talking with a friend of mine about having taken this helicopter trip. This is someone from another part of the country. I talked about the beaches on Long Island, particularly along Fire Island where we were. He looked at me quizzically and he said, "I did not know there were beaches in New York."

[Laughter.]

Senator CLINTON. So if nothing today, I think we have that very clear that we not only have beautiful beaches, but endangered beaches that we are trying to make sure could be preserved for future generations.

Thank you, Mr. Chairman.

Senator BOND. Thank you, Senator Clinton. I have enjoyed the beaches on Long Island, so I am aware of them.

Senator JEFFORDS. Mr. Chairman?

Senator BOND. Do you have another question? I was going to be generous, because I was going to slip one in myself.

[Laughter.]

Senator JEFFORDS. I would like to submit a question for the record.

Senator BOND. Without objection, so ordered.

Is there anything else you want to submit, Senator Clinton.

Senator CLINTON. We may very well, Mr. Chairman.

Senator BOND. Without objection, so ordered.

There is one point I forgot to raise with Congressman Myers. In your testimony you referred to the European model where they are actually encouraging freight movements to water and off the highways. You also emphasized container shipping with barges which might be the wave of the future.

Can you give us just a little bit of an idea of how that would work and what you see are the prospects there?

Mr. MYERS. Great prospects for this in the future. I am surprised it is not used more. We put these containers on trucks, haul them to a port some place. We even put them on airplanes today, these big containers. I do not know why it is not used more. But we have several. I think there is one on the Tennessee-Tombigbee. I believe there is a little bit out there. I am trying to think where else I have seen it in my years.

Containers are an excellent way. Water is the cheapest way in dollars. It is the cleanest environmentally. It does not go through any large cities in polluting the system. Then there is safety.

I live just about 3 miles from Interstate 75. About a month ago a tank truck blew up on a highway on Interstate 75, about 3 miles from where I live. A cement bridge was destroyed. Now, last week, a cement bridge in Connecticut was destroyed. I think I read that there was some place here on Interstate 95 again, today a wreck. The safety of the water transportation, if nothing else, is there.

But the cost is the biggest thing, both environmentally as well as dollars to the shipper. I just do not know why we have not done a very good job. Again, I am going to plead to each of you if you would present to a service club back home—Kiwanis, Rotary, Lions Club, the Chamber of Commerce—the American people do not un-

derstand the importance of something that they have inherited—inland waterways of 25,000-plus miles, and the cost of shipping in every respect. I just do not think we are doing a very good job of selling it.

I know sometimes it is not politically popular to talk about these issues, but it is so important. It is such a safe and clean way, and an available way today. It is deteriorating. Let us do something about it. Thank you.

Senator BOND. Thank you very much, Congressman Myers.

Thanks to all of you on the panel. We do appreciate your written testimony. We thank you very much for giving us the guidance that we will need as we draft the bill and try to stand on the very ambitious schedule that has been outlined for us.

Now we will call the third panel. We have Dominic Izzo of the American Society of Civil Engineers; Gregory A. Zlotnick, director of the Santa Clara Valley Water District; Ray Poupore, executive director of the National Heavy and Highway Alliance; and Scott Faber, water resources specialist of Environmental Defense.

Mr. Izzo, if you would begin, please.

STATEMENT OF DOMINIC IZZO, AMERICAN SOCIETY OF CIVIL ENGINEERS, WASHINGTON, DC

Mr. IZZO. Mr. Chairman and members of the committee, good afternoon. My name is Dominic Izzo. As you may know, I had the honor to serve as Principal Deputy Assistant Secretary of the Army for Civil Works from July 2001 until November 2002. I could not have done my job in that difficult time without the strong support of this committee and its distinguished members. So thank you.

It is a great privilege for me to appear before this committee today as a private citizen to testify on behalf of the American Society of Civil Engineers, to present the Society's views on the Water Resources Development Act and the future of the U.S. Army Corps of Engineers.

I have to say that I have been very heartened by all of the testimony that I have heard today. It has been fantastic.

I am glad to hear so many people speaking well of the Corps.

They have been subjected to a great deal of scrutiny in Congress and by the news media in recent years, as you well know. That has led to widespread public criticism of the Corps and its programs.

Some of that criticism was deserved; much of it was not.

Regardless of one view, we heard the refrain again and again:

It is time to reform the Corps of Engineers. Let me state at the outset one key point. The Corps of Engineers does not need major overhaul.

Like any institution, it can work better, but that is as true of Congress and other large Government Agencies as it is of the Corps. The larger point needs to be made as well. I have heard other speakers make it, and that is that the Nation needs the Corps of Engineers because the Corps is uniquely situated to deal with large water resource projects having a distinctly national original impact.

No short-term process reforms, no matter how well-intentioned or necessary, should be allowed to deflect the Corps from its mis-

sion of providing comprehensive infrastructure and environmental protection for the Nation's water resources.

Certainly the Corps can improve some things: its economic analysis. Better mathematical models may provide better projections. In the end, however, these are just estimates based on many assumptions, and like all estimates, they can change.

Better uncertainty analysis may help warn decisionmakers of these risks. To improve economic analysis and avoid a decision-making gridlock on Corps projects, we should consider establishing the economic value of environmental cost and benefits. Of course, this is a challenge to economists and policymakers alike, but we believe it can be accomplished.

Done properly, it will facilitate determining appropriate mitigation for major projects. The Administration should revise the principles and guidelines in coordination with the environmental community and industry to achieve a consensus that will move much needed Federal water resources projects forward.

Finally, we should recognize that the justification of large projects for investment by the Federal Government remains a political decision. The principle that the benefits of the project must exceed the cost is a good one, but more than pure economic benefits and construction costs are at stake.

There are political, social, economic, and environmental costs and benefits. These must all be weighed carefully.

Setting priorities for Government spending unquestionably requires a political decision. No mathematical or economic modeling can change this. It can only provide a better framework for making an informed decision.

Revising the principles and guidelines to emphasize uncertainty analysis and include the economic value of environmental costs and benefits should provide the data for political leaders to select the best projects for Federal funding. The Corps must have the best analysis that modern engineering, economics, and environmental science can provide.

I believe it has that now and it will continue to do so.

This committee can assist the Corps in improving its planning and analysis in this WRDA, but I urge you as the first step in WRDA to reaffirm the mission of the Corps as the Nation's lead Agency for water resource projects. There should be no doubt that the Corps is the leader.

Thank you very much. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Izzo.

Now we will turn to Mr. Zlotnick.

STATEMENT OF GREGORY A. ZLOTNICK, DIRECTOR, SANTA CLARA VALLEY WATER DISTRICT, SAN JOSE, CA

Mr. ZLOTNICK. Good afternoon, Mr. Chairman. My name is Greg Zlotnick. I serve as an elected member of the Board of Directors of the Santa Clara Valley Water District, a public agency providing wholesale water supply, flood management, and watershed stewardship to 1.7 million residents of California's Silicon Valley.

Thank you for holding this hearing and inviting my participation today. You have asked me to discuss our Agency's experiences with the Corps of Engineers and suggest process improvements in the Civil Works Program.

Our Guadalupe River project through the heart of Silicon Valley is considered a national model as an excellent example of what the Corps can accomplish working with local sponsors as true partners. After litigation was threatened against the project, as a consequence of an endangered species listing late in the process, the Corps joined in a collaborative process that we initiated to resolve mitigation issues, resulting in a refined project acceptable to all.

This did not go unnoticed. The San Jose Mercury News editorialized, "At a time when government bashing is an overplayed sport, the Guadalupe Flood Control River Restoration Project is a great example of how government can get it right."

Another example of partnering is the 16,000-acre Salt Pond Restoration Project getting underway in the South Bay.

In March 2003, these salt ponds were acquired by the State, the Federal Government, and private foundations to restore them to wetlands. Our concern was to ensure flood protection was incorporated into the restoration effort. We enthusiastically sought Corps involvement.

Not everyone was so enamored of the Corps, however. The lead State agency for the restoration effort only knew the old Corps, environmentally ambivalent, bureaucratically challenged, and unresponsive to local perspectives. We knew, however, that the Corps could be a valuable and valued partner. So we recently coordinated a meeting between the officials of the skeptical State agency and the Corps here in Washington. I am glad to say that we are now all together partners on this project.

While we are encouraged by the Corps' shift toward promoting multi-purpose watershed projects, projects still take too long. Multiple decades is simply unacceptable. The Corps must do better. Together we can do better. Feasibility and preconstruction phases of projects in particular present opportunities for improvement.

Recent changes to a more streamlined reconnaissance study process have been a big help, but we further suggest allowing a local sponsor to undertake a recon investigation on its own initiative, with the Corps monitoring rather than doing the work, but still making the Federal interest determination.

This would allow the Federal interest to be determined prior to coming to Congress for a new start. Project cooperation agreements represent another opportunity for improvement. All construction agreements must receive ultimate sign-off in the Assistant Secretary's office. This is overkill.

District commanders should be empowered to tailor project cooperation agreements, subject to general principles from headquarters, to the capabilities and track record of the local sponsor. This should also apply to feasibility and preconstruction phases, as well as advanced work.

When a local sponsor is willing and able to get moving on a project, to reduce potential flood damages as well as total project costs, the Corps system should accommodate this as long as the sponsor's work is integral to the project. Such partnering agree-

ments, as included in the House bill, would take advantage of local capabilities without forfeiting national policy oversight, and allow qualified local sponsors to accelerate projects.

NED criteria guiding feasibility analyses also need to be reevaluated, as they are too narrow and undervalue the indirect benefits of flood protection and environmental restoration in the calculus of project cost benefit ratios.

Accountability for delay in the feasibility and design stages need to be enhanced as well. It is extremely frustrating to watch years go by on a study with no discernible progress on a project. Feasibility studies, as well as detailed design and preconstruction activities, should be completed on date-certain basis. Costs associated with and attributable to Federal delay should not be passed on to local sponsors and should be 100 percent Federal responsibility.

On a separate note, we believe that in recent years OMB has gone beyond its proper role in dealing with the Corps on congressionally funded projects. OMB is now apparently doing technical reviews of Corps reports, which is beyond its expertise and appropriate scope of purview, significantly slowing down the process on already approved projects.

Mr. Chairman, the Santa Clara Valley District has a long history with the Corps, not always smooth, but now very positive, progressive, and always improving in meeting the needs of our region. We consider ourselves true partners. As the committee considers how to improve Corps processes and reaffirm Congress' commitment to a vigorous civil works program, we urge the empowerment of field officers and local sponsors to build flexibility and innovation into this system, as well as allowing for local dollars to flow early to save lives, protect the economic vitality of our communities, and let sponsors and the Corps meet challenges we confront together more effectively and efficiently.

Thank you, Mr. Chairman, for your time and consideration.

I would be glad to answer any questions you may have. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Zlotnick.

Mr. Pourpore.

STATEMENT OF RAY POUPORE, EXECUTIVE DIRECTOR, NATIONAL HEAVY AND HIGHWAY ALLIANCE, WASHINGTON, DC

Mr. POUPORE. Thank you, Mr. Chairman. I do appreciate the opportunity to testify this afternoon. My name is Ray Poupore. I am the executive director of the National Heavy and Highway Alliance.

This Alliance represents the key construction traits that build our Nation's infrastructure. They are the laborers, the operating engineers, carpenters, iron workers, cement masons, Teamsters, and the brick layers. These unions represent over a million men and women that actually build every day with their hands our Nation's infrastructure.

But let me digress for just a moment, Mr. Chairman, and take this opportunity to thank you and your entire committee for the outstanding job you did on reauthorizing the highway bill. We just hope that the House can catch up with you guys.

It does not look too good. But we certainly appreciate that effort. That is going to put a lot of men and women to work in this country. We need good jobs and we need good paying jobs. That is the reason I am talking before you this afternoon.

There is a dramatic need for the opportunity to create good jobs right here in America. That opportunity that the Corps of Engineers has put forth in their construction program for the Upper Mississippi River and Illinois Waterway can create thousands of good-paying American jobs, help improve our competitiveness in a global economy, and ensure a sound environment.

We have already heard this afternoon testimony about the current condition of that lock-and-dam system. We know it was not designed to meet today's competitiveness. It was designed 70 years ago when we were using steamships. We need to step up to the plate and address the deficit in our waterway infrastructure. We have two major problems that are facing us right now within that region. The first is insufficient funding to keep the existing system working efficiently. Second, we have capacity constraint for future growth. We have 600-foot locks. We need 1,200-foot locks.

Everybody agrees that out of those 37 locks in that system, only 3 are 1,200 feet long.

We are working closely with the Midwest Area River Association, MARC 2000. They are trying to put men and women to work with the unions that I represent. This program that the Corps of Engineers has for expanding our infrastructure and navigation system is a job-creating machine in two ways.

First, by building these 7 to 12 locks, we would create over 3,000 jobs per year for as many as 30 years.

Second, those jobs will help the communities in the areas where they are built. We need the committee's support for construction authorization for at least seven new locks on the Mississippi Dams 20 through 25 and in the LaGrange and Peoria locks on the Illinois waterway. We would seriously like you to take a long look at that.

It is important to recognize that we are not rebuilding the entire system, Mr. Chairman, nor are we adding dams or changing anything other than placing an additional lock in these pre-existing structures. This plan to build new locks at these locations received overwhelming support at public meetings held this past fall, with 82 percent endorsing that we move forward.

Our union members joined with industry representatives and farmers from the region to endorse the need to prepare for our future in terms of jobs, exports, and overall competitiveness. Over \$180,000 in environmental mitigation is included as well.

So in closing, the National Heavy and Highway Alliance and its key construction trade unions strongly support the modernization of the Upper Mississippi and Illinois River lock system because it will ensure a more competitive economy, a sounder environment, and it will create thousands of skilled good-paying jobs.

We are proud of the previous work that Americans have done in the past. We think it is time that we step up and provide the future and opportunity to have a first-class waterway infrastructure in place.

Mr. Chairman, I thank you for this opportunity. I would be willing to answer any questions you may have. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you very much, Mr. Poupore.

Mr. Faber.

**STATEMENT OF SCOTT FABER, WATER RESOURCES
SPECIALIST, ENVIRONMENTAL DEFENSE, WASHINGTON, DC**

Mr. FABER. Senator Bond, it is good to see you again.

It has been about 6 years since we stood under the arch together to celebrate our efforts to help restore the Mississippi and Missouri Rivers. I certainly hope we will have something to celebrate again this summer.

Senator BOND. Well, we look forward to it.

Mr. FABER. I fear, like General Flowers, this may be my last opportunity to testify before you, but only because of the substance of my comments, not because I am going on to some greater reward.

[Laughter.]

Senator BOND. That could happen.

Mr. FABER. That could very well happen. I will do my best.

[Laughter.]

Senator BOND. We did work together with the Missouri Farm Bureau. We always look forward accommodating the various divergent interests. We would be happy to hear your testimony.

Mr. FABER. Thank you, Senator. Let me just start by saying that environmental groups like Environmental Defense and the National Wildlife Federation, and the American Rivers recognize that we need to build levys to protect our cities, and that we need to have reliable water-borne commerce to move bulk commodities, and that we need deeper ports to expand trade.

It is our concern, however, that as worthwhile as many of these projects are, that they do sometimes have devastating impacts on the environment. We simply want to be reasonably certain that these projects are indeed worth building, and that whatever impacts they have are fully mitigated. I do not think anyone would question the wisdom of building the flood wall to protect St. Louis, or deepening the New York-New Jersey harbor.

But we simply want to be sure that these projects are indeed worth building and that the impacts are fully and quickly mitigated. The reason I am here today is this. We have heard so much about some of these studies. Now three GAO panels, the Army's Inspector General, and four separate panels of the National Academy of Sciences have found significant problems with specific Corps studies, either project benefits have been overestimated, project costs have been underestimated, or both.

It is our desire to simply make sure that the Corps uses the very best economic tools, as Mr. Izzo mentioned, that those analyses are subject to outside peer review, and that if indeed a project does need to go forward, that whatever impacts there are, that they are fully and quickly mitigated, and concurrently mitigated, if possible.

The track record is troubling. Many of the projects that have been constructed in the last 50 years have not produced the bene-

fits that have been predicted. When you step back and look at historic waterway projects, you will find that only 2 of the 15 projects constructed since World War II have attracted as much commercial traffic as the Corps originally predicted.

That is very troubling for several reasons. One, obviously, is that billions and billions of dollars might have been invested elsewhere. But it is probably more troubling because now as a result of that, we are spending 29 percent of our maintenance funding on waterways that carry only 2 percent of the traffic.

It goes back to what Senator Graham was saying. We have a billion dollar maintenance backlog. Does it not make sense to focus our maintenance dollars on those waterways like the Mississippi, like the Ohio, that carry 90 percent of the traffic on the waterways system?

We think that using the best economic tools and subjecting them to peer review is the surest way to make sure that future investments are really economically sound. We think that peer review has to have three critical features.

No. 1, it cannot delay studies. We have proposed that reviews be concurrent with public review, so the same time the public is reviewing a study, a panel is looking at that study as well. No. 2, the panels be truly independent, that they be appointed by someone outside the Corps.

No. 3, there are very, very predictable triggers for review. We have proposed four triggers. Any project that costs \$25 million, when a Governor requests review, when a Federal Agency charged with review requests review, or when the Secretary determines that the project is so controversial that it determines review. It is our sense that that sort of system would avoid much of the controversy that has cast the sort of cloud of suspicion over the Corps.

Let me just make a few comments about the Upper Mississippi. I know my time has expired, but I know you would be disappointed if I did not.

Let me start by saying that we agree that delays on the Mississippi River are important, that we need to address them, and that the transportation needs of farmers are very important. That is why we support taking immediate steps, beginning in 2005, or in 2004 if possible, to deploy helper boats, and to begin to pilot traffic scheduling as the Corps has now proposed, while we take the time to complete the analysis that the Corps has begun on the need for longer locks.

Based on what we know today, and based on what the National Academy of Sciences said, the justification for building locks today is not very strong. Traffic is declining. The economic tools that the Corps is using, frankly underestimates some of the other designations for grains, such as ethanol plants and feed lots.

We think that the region and the Nation would benefit from taking a few more months to complete a credible analysis of this project. In the meantime, let us go out and do the things that we know can work.

Thank you. I would ask that my full statement be placed in the record in its entirety.

Senator BOND. Without objection, so ordered.

Thank you, Mr. Faber.

Mr. Izzo, would you like to comment on Mr. Faber's comments? I thought there were several things that might be within your scope.

Mr. IZZO. Well, first of all, I would like to say that I always thought that EDF was one of the more cooperative groups on the environmental side when I was working here. I do appreciate their help on several issues.

I just have to differ that we would gain a whole lot by further study on the Upper Mississippi. I have a very open mind on the whole issue. If the political decision were to remove the dams, if that is what the folks up there want, I think we could do that.

On the other hand, I do not think the folks up there want that. I think the issue that we have is whether we want to have grain exports out of the Upper Mississippi Valley or not.

I always took the position that, "Well, we ought to get the Secretary of Agriculture and the Secretary of Commerce to really vote on this. It is not really the Corps of Engineers job."

The Corps can tell you that it is reasonable that you will get some economic benefit, just like you will get some environmental effect. They could quantify that to a certain degree.

But the overall impact on the policy for the country really is one of agriculture and commerce. All the engineer is going to do is implement these. These guys have been trying their hearts out for almost 10 years to come up with an economic analysis that people will agree with. Sometimes you just cannot agree on those exact numbers.

Senator BOND. The problem is they are trying to do a 50-year study when nobody in their right mind has the foggiest idea of what it is going to look like in 50 years.

Dr. Collins, the Chief Economist in the USDA, said his best longest term guess was 10 years when there would be about a 40 percent increase in corn exports but beyond that, it was not even worth speculating. I think you have to realize that you either spend your time trying to guess the future, or you shape it.

If we continue to study it, as I said earlier, I guarantee that we will not be shipping the commodities and grain that we need in the future because these locks and dams are going to come down.

Mr. Poupore, I had heard the figure of 48 million man-hours of work on the locks and dams. I have stood at the edge with your members and others watching the sheets of water cascading through locks that were supposedly keeping the water from coming down steam, and just hoping that the things did not break like your 70-year dam in Vermont.

The 48,000 man-hours includes what area and what projects?

Mr. POUPORE. Those were the seven locks described in my testimony. Five are on the Mississippi and two on the Illinois waterway. Those seven, along with the maintenance of the current lock system on the Mississippi, translates to approximately 48,000 man-hours of work for construction workers.

Senator BOND. Mr. Zlotnick, I was most interested to hear about your cooperative relationship between the Santa Clara Valley Water District and the Corps. What, in your opinion, is the single-most important reform or efficiency that we could make to the Corps system? Why would say that?

Mr. ZLOTNICK. Well, I think from our perspective, Mr. Chairman it is to allow the districts to take a little more responsibility and have some more authority to work with local sponsors more directly in terms of approving and moving forward when the local sponsor has the capability to do so.

In that way the local sponsors do not feel, in essence, they are being held hostage, if you will, to things coming back to Washington and getting lost in the load that is back here. We think that an Agency like ours, for example, that has a long track record and has lots of capability and, frankly, is fairly aggressive because we are trying to protect not only an important part of California, but in terms of the Nation's economy, Silicon Valley is quite critical.

We have abilities that we are able to move forward on.

We think that working as partners and as we have developed various projects with the districts, that perhaps it makes sense to say, "subject to the national policy guidelines that the districts have to abide by." The districts can say, "OK, we can move forward with you in oversight, not necessarily doing all the work ourselves, but as partners."

As I said, that would speed things up, we think. It would just also be more efficient overall. It also would be much more reflective of the local communities' desires for projects as well.

Senator BOND. Mr. Faber, I do not want to slight you by not asking you a question. Is a big part of the environmental problem on the Mississippi River sedimentation? Do you see that problem as being caused by locks and dams? Are the locks in and of themselves any grave threat to the environment?

Mr. FABER. Well, Senator, as you well know, the traffic moving on the Mississippi River through locks has some effect on the environment. It pushes sediment into the backwaters and side channels that are critical nurseries for wildlife.

It uproots the marsh plants that the ducks and fish rely on as a food source. There is some direct killing of fish and other organisms as the barges move through the water.

But it is by no means the biggest threat to the species that depend upon the Mississippi River or the millions of people whose livelihoods depend upon the health of the Mississippi River. In fact, it is really the construction and operation of the infrastructure, not the traffic itself, that is a much more significant threat.

That is why I am so encouraged that the Corps of Engineers, working with the States, has developed a restoration plan to address those historic threats that Senator Clinton mentioned. We did not really fully understand when we authorized the lock and dam system in the 1930's.

I think by itself the decision about whether or not to build locks is not properly seen as a question about what is in the best interest of the health of the Mississippi River.

I see it as two other questions:

Are we going to use the best available economic analysis to decide whether or not to add big new investments to the already enormous backlog of authorized projects, the \$41 billion backlog? Are we going to use the best available economics to decide whether to spend \$150 million a year presumably for 15 years and perhaps more?

I think the second question is: Is that \$150 a year that we would spend extending the length of locks be better spent deepening a port or increasing the height of the flood wall at St. Louis?

That sort of prioritization is not something that we have done very well, but it is at the heart of this issue. It is a huge investment. If we go ahead and approve the expansion of locks, it will drain at least 10 percent of the annual appropriations for the for the construction appropriations for the Corps for decades.

That is the sort of question we should be asking. What are those dollars competing with? I hope that is what we have a chance to think about as we move forward.

Senator BOND. Thank you.

Senator Jeffords.

Senator Jeffords. Mr. Faber, in your testimony you state that the Corps replaces wetland with fewer acres of less valuable habitats. Can you provide additional examples of this problem?

Mr. FABER. Absolutely. The problem generally is this.

Hypothetically, the Corps will occasionally replace 100 acres of wetland with 10 acres of trees and not always do it concurrent with the construction of the levy or the dam that has destroyed the 100 acres of wetlands.

Another example would be the expansion of the levy along the lower Mississippi River where the Corps is replacing several thousand acres of bottomland with a few thousand acres, or about one-third of the acres by reforesting agricultural lands.

There are many examples where the Corps has gone through this process of replacing thousands of acres of valuable wetland habitat or flood plain habitat with a few hundred acres. Frankly, I think this is just a matter of clarifying what Congress wrote in 1986 to simply require that we replace apples-with-apples, that we replace wetlands-with-wetlands, and that we do it as quickly as possible, and concurrently if possible.

The ideal situation would be to simply replace each acre of wetlands with a similar or superior acre of wetlands. This would not even require the Corps to meet the standard that the Agency forces private developers to meet.

Typically when a private developer destroys a wetland, they have to replace that acre on a two-to-one or a three-to-one basis. If we could merely get to a one-to-one in-kind replacement system, that would be real progress.

Senator JEFFORDS. Should the Corps meet the same standards that private developers meet when they impact the wetlands?

Mr. FABER. Well, yes, and I think in particular the mandate that developers try to wetland impacts before they go ahead and construct a development should apply to these civil works projects as well. But simply requiring that the Corps at least meet a one-to-one ratio, not even requiring that they meet the same standard that developers make, we would consider real progress when compared with what we are doing today.

Senator JEFFORDS. What steps should we take to ensure that mitigation projects are successful? How do we find out?

Mr. FABER. One of the real struggles with mitigation is that the track record of this relatively new science is not very good, that in general about half of these mitigation projects. But there is no ex

post facto review to see whether Corps mitigation is actually producing the benefits that the Corps has promised.

So what we believe makes sense is to have the Fish and Wildlife Service, which is involved in developing these mitigation plans, and the Corps develop a mitigation tracking system to make sure that one, mitigation is being completed concurrently or not later than the end of the next fiscal year, and then two, make sure that the mitigation is successful.

If it is not successful, to have some sort of contingency plan to again try to mitigate successfully.

Senator JEFFORDS. I think I asked this to the Corps earlier. What changes should be made to Section 1135 and Section 206 programs? What changes, if any, would you recommend for those two programs?

Mr. FABER. I think there are three critical changes that need to be made to those programs that are very popular and heavily over-subscribed. One is that the authorized ceiling for both programs be lifted to \$100 million annually and that the per project cap be lifted to \$10 million annually. But I think a probably more important reform that Mr. Zlotnick hinted at in some ways is to give local units of government the ability to study and design these small projects, subject to review and approval by the Corps.

We have already given local units of government the ability to do this for small flood control projects, and to allow local units of government, counties, and municipalities, subject to Corps review and approval, to design the small aquatic system restoration projects. It would save an extraordinary amount of money and take advantage of the fact that these local units of government usually know a heck of a lot more about these resources than the Federal Government.

I think that is a complaint that I have heard over and over again in Vermont and New England generally. The cost to the Corps of designing these projects, these small restoration projects, is much, much greater than the cost would be if the local unit of government were able to design the project subject to the Corps' oversight.

Senator JEFFORDS. In your testimony you proposed that independent review should not delay studies. I think most members of this committee share that sentiment. How would the review system that you propose ensure that studies are not delayed?

Mr. FABER. What we proposed is that at the same time the public is reviewing a Corps feasibility study, which is generally 180 days by regulation, that the panel also be reviewing the study so that those reviews occur concurrently.

In that way it would not add any time to the already two-to-three year planning process.

What we would also propose is that if this panel simply cannot get its work done in that timeframe, that the Corps continue on, that 180 days is certainly enough time to review these feasibility studies and provide the Corps some feedback on their merits.

We think it has two benefits. One obviously is that it does not add any time to the process, but the other is that that allows the panel to review the entire draft feasibility study and draft environmental impact statement. One of the problems with the House passed bill is that the review would start sooner and end before the

Corps has completed work on its studies. These mechanical questions, I think, are really important. We need to make sure that the panels are reviewing a complete enough product so the public has some faith that that review is really meaningful.

Senator JEFFORDS. Thank you very much. Those are helpful answers. I appreciate it.

Thank you, Mr. Chairman.

Senator BOND. Thank you, Senator Jeffords.

I might ask Mr. Izzo one last question.

Half the money going into the Corps is paid by user fees.

They are coughing up the money. Where do they think these dollars should be spent?

Mr. IZZO. The users obviously want it to be spent on what they paid the fees for. I know this is a major issue for both the Inland Waterway Users Fund and the Harbor Trust Fund.

That money just continues to accumulate as one of the previous speakers showed you in the chart.

Senator BOND. There is no question among those who are paying the freight of where those investments should be made.

Mr. IZZO. Absolutely.

Senator BOND. Gentlemen, we will have additional questions, I am sure, from many of the members of the committee. We would appreciate your responding to those.

Without objection, so ordered.

I would invite any of you who have further thoughts, and perhaps there are some comments from other witnesses that have given you new ideas, or you wish to offer a contrary view, we invite those views. We would ask that you get them in by next week, by April 7, if you can.

Without objection, so ordered.

Senator BOND. We have gone through a lot of testimony today. I will look forward to reviewing the written testimony, as I am know the members of the committee will.

Senator Jeffords, do you have anything further?

Senator JEFFORDS. No; I go along with you on your request. I think that would be very helpful. I deeply appreciate the time that you have all put into appearing here.

I think you have given us many things to work upon.

Senator BOND. Thank you very much.

The hearing is adjourned.

[Whereupon, at 4:11 p.m., the subcommittee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR
FROM THE STATE OF ALASKA

Mr. Chairman, thank you for calling this hearing on such an important issue. I'm pleased that the Committee will be considering a Water Resources Development Act this year. The U.S. Army Corps of Engineers has an important mission in my State, which includes thousands of miles of coastline and numerous harbors.

To begin, I would like to discuss a few Corps-related issues that are important to my State.

I have some concerns about the Corps' performance-based approach to developing its budget request. Such an approach gives priority to funding projects that have the highest "economic and environmental returns," according to the Corps. Earlier this month, at a hearing of the House Appropriations Subcommittee on Energy and

Water Development, Assistant Secretary of the Army Woodley referenced this approach.

As my State contains many small, isolated communities that are only accessible by air or sea, I have concerns about this approach. That is why I am supporting a provision in the House WRDA bill, H.R. 2557, that allows the Corps to recommend harbor and navigation improvement projects without the need to demonstrate that the project is justified by "national economic development benefits" if (1) the community served by the project is at least 70 miles from the nearest surface accessible commercial port with no direct rail or highway link to another serviceable community or it is located in Puerto Rico, Guam, the Northern Mariana Islands, or American Samoa; (2) the harbor is economically critical such that over 80 percent of the goods transported would be consumed within the community served by the harbor and navigation improvement; and (3) the long term viability of the community is dependent upon the harbor, including access to resources and facilities designed to protect public health and safety. This provision would be beneficial to many communities in my State. The harbor-related needs of the small communities in my State are just as important as the needs of the ports of larger cities in our Nation, especially when one bears in mind that most critical cargo that is delivered to such communities is delivered by sea.

There are two other sections of the bill of which I am supportive that I would like to discuss in further detail.

The first is the provision concerning the streamlining of projects. This language authorizes the Corps to expedite the environmental review process by requiring the Corps to coordinate the actions of all appropriate governmental agencies—in all levels of government—including Indian tribes. The section mandates that the Corps draft a process whereby all relevant governmental agencies review and issue permits simultaneously, as much as is practically feasible. Such reviews and permitting would be completed within a timeframe determined by the Secretary of the Army in concert with other agencies. For far too long, Corps projects in Alaska have been delayed time and time again due to environmental reviews and permits. This is unacceptable. If we were residents of a small, remote community that needed to have its harbor dredged to allow larger vessels to enter its harbor to deliver such necessities as fuel and food and the dredging project was delayed due to environmental issues, then the problem would be self-evident.

Another provision in the House WRDA bill of which I am supportive is the provision increasing the Federal cost-share responsibilities for construction—by 25 percent—and operations and maintenance—by 50 percent—for deep draft navigation projects between 45 and 53 feet deep. Many of the smaller communities in my State that need Corps projects also do not have the available funds to meet a high funding match threshold. Such local governments have limited abilities to collect taxes and fees and often turn to the State government for financial assistance. Unfortunately, the State government in Alaska is experiencing its own budget difficulties and is becoming less and less able to assist local communities with such projects. I know that many other State governments are also experiencing budget difficulties, as well.

I have nothing further. Mr. Chairman, thank you once again for holding this hearing.

STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Thank you Mr. Chairman for calling this hearing today. I am pleased that the Committee is once again taking a close look at the mission and operations of the Corps of Engineers. There is widespread agreement that we should refine the Corps' mission and reform the way the Corps develops projects and how it implements them, to reduce costs and funnel resources where they are most needed or where they provide the greatest economic and environmental benefit to local communities and the Nation. Greater transparency and accountability are also important. That said, I have always been pleased and impressed with the work of Corps professionals on the ground in Montana. I look forward to hearing from the witnesses today, and working with our Chairman and Ranking Member, and my colleagues on this committee, as we consider a Water Resources and Development bill.

Mr. Chairman, I will keep the remainder of my statement brief, but I'd like to touch on one particular issue that is of the greatest importance to my constituents in Montana—recreation. I read with great interest Mr. Woodley's testimony where he touched upon the core purposes of the Army Corps. Recreation barely received a mention in his statement, despite the fact that the Corps is one of the largest Federal providers of recreation, generating billions of dollars and thousands of jobs nationwide. I think the Corps' perspective needs to change, just as the communities

and economies that depend on Corps projects have changed over the past 50–60 years.

Recreation around Fort Peck Lake in Montana accounts for an enormous percentage of the local economy, close to 50 percent. The recreation economy takes on even greater significance when you consider the devastating effects of years of drought on the other major piece of the local economy agriculture. Record low lake levels at Fort Peck Lake—levels not seen since the project was created—have dramatically impacted this all important recreation economy. With water so low, people just don't come to fish or boat on the Lake. When people don't come, they don't spend their money at local businesses. This has a ripple effect in the entire area, as local businesses dependent on recreation don't spend as much money in their communities, or they lay off workers or don't hire.

We're tired of watching water levels drop at Fort Peck. I won't go into Montana's disappointment in the Corps' release—finally—of a new Master Manual governing operations on the Missouri River. I know you have a very different view of that document, Mr. Chairman, but this issue is so important to us. It was incredibly disheartening to us that even minor concessions made to upper basin States like Montana in terms of better drought conservation measures for our reservoirs were weakened at the last moment to appease downstream interests. Regardless, we're so far into this drought cycle now, that the minor concessions on drought conservation are too little, too late.

I firmly believe that one of the reasons Montana continues to take a back seat in management decisions on the Missouri River is the fact that the Corps does not consider recreation to be nearly as high a priority as more "traditional" uses of the River, for example navigation. While that may have been true 50 or 60 years ago, that is certainly not the case now. Recreation is a huge national industry, and it's vital to communities along the Missouri River, particularly to rural communities like those in central and eastern Montana.

Mr. Chairman, I understand that during a drought there just isn't enough water to go around and everyone has to share in the pain. My concern is that Montana has suffered far more than its fair share of pain when it comes to bearing the burden of drought at Fort Peck Lake. The rules aren't working for us, so I think it's time to change the rules. That's only fair. I think it's time for Congress to make it clear to the Corps that recreation must be given a higher priority when the Corps makes management and other decisions impacting river and reservoir use. I believe we would only be restating the obvious, but it appears that the Corps needs clear congressional direction on this point. I will work hard in this WRDA bill to give it to them.

One final point—I agree with my colleagues that the funding constraints the Administration and the Congress have put on the Corps are counter-productive. It impacts good and bad projects indiscriminately and has led to several projects in my State coming up short on funds, even after those funds were appropriated specifically for these projects. In the case of the Fort Peck Fish Hatchery, this funding shortfall has amounted to millions of dollars. This is hard on the local project sponsors, and it's often hard on the local communities and economies that depend on these projects. Over time, it's going to cost us more to complete these projects than if they had been adequately funded from the start. Finding a better way to manage and fund Corps projects is an important part of restoring some sanity to the civil works budget.

Thank you again, Mr. Chairman for calling this hearing today. Again, I look forward to working with you as we explore a WRDA bill further.

STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

I am pleased the Committee is holding this hearing to discuss the role of the U.S. Army Corps of Engineers in meeting our water resource needs. I am pleased at the work the Corps is doing in Nevada and nationwide, however, they need our help to continue.

There are more projects than there is funding, so we need to work together to pass a Water Resources Development Act (WRDA) this year that increases project authorizations.

Last year, the Corps received \$4.57 billion for the Civil Work Program. The President's fiscal year 2005 budget request is for \$4.22 billion, however, there are several problems with the President's request. First, it circumvents public participation in Corps projects by dictating that all Corps project studies designed to identify technically feasible, environmentally—acceptable, and cost effective project alternatives go to the Office of Management and Budget before being presented for public com-

ment. This is inconsistent with the NEPA statute. The appropriate process is for the Corps of Engineers to conduct a study, provide multiple alternatives for the public to review, collect public comments, and select an alternative based on that public process.

Second, it forces the Corps to breach agreements with local sponsors by zeroing out projects where the Corps has undertaken a beach re-nourishment project with such a local sponsor and signed a project cooperation agreement, or PCA. Many ongoing projects hold signed PCAs and receive funding through congressional adds, however, the Administration plans to release a policy via letters to every individual community with a beach re-nourishment project explaining the Federal Government is pulling out of all existing PCAs to conduct periodic beach re-nourishment, thereby breaching all of those existing contracts.

Additionally, it cancels 43 ongoing projects in several States, and would mean that projects that have already received fiscal year 2004 funding would lose that funding. The Administration arbitrarily reduced the number of projects to be funded during the Project Engineering and Design (PED) phase from 47 to 22. This reduction breaks standing agreements with local sponsors who are contributing 50 percent of the funding for this phase of a project. In Fiscal Year 2004, 75 PED projects were funded.

The President's Fiscal Year 2005 budget includes a policy that there will be no new contract awards for any projects other than 8 high priority projects selected by the Administration. There are currently 1,000 ongoing construction projects, 992 of which will be stalled by this new policy. The funding for the Corps to study projects is drastically reduced from \$117 million appropriated in 2004 to \$90 million requested by the Administration for fiscal year 2005.

Last, \$35 million is allocated in the President's Budget to the Assistant Secretary of the Army's office for use in "emergencies." The Corps has existing emergency response responsibilities and capabilities that are funded through the normal process. This money could be better allocated elsewhere.

While there is much work to be done, I am looking forward to working with all the Members of this Committee on an authorizing bill that meets the needs of the Corps. I am pleased that the Chairman has plans to move WRDA forward as quickly as possible so our projects can continue.

STATEMENT OF HON. JOHN PAUL WOODLEY, ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS) ARMY CORP OF ENGINEERS

Mr. Chairman and Members of the committee: I am John Paul Woodley, Jr., Assistant Secretary of the Army for Civil Works. Accompanying me is Lieutenant General Robert B. Flowers, Chief of the Army Corps of Engineers. We are here today to discuss the role of the Corps of Engineers in meeting the Nation's water resources needs. We appreciate the opportunity to work with the Committee on this important topic.

HISTORY AND MISSION OVERVIEW

I've learned a lot about the Corps and its civil works responsibilities in the 7 months I have been the Assistant Secretary. A piece of history that was interesting to me is how the Army got into civil works and water. After the War of 1812, both commercial development and national defense in the country required more reliable transportation arteries. Federal assistance, however, was slow in coming and was a "product of contentious congressional factions" and an Administration that did not want to meddle in the States' affairs. In the 1824 case of *Gibbons vs. Ogden*, however, the Supreme Court ruled that Federal authority covered interstate commerce including riverine navigation. Shortly thereafter, the General Survey Act authorized the President to conduct a survey of nationally important roads and canals from a commercial, military and mail transportation point of view. The President gave that responsibility to the Army Corps of Engineers. About a month later, a second act appropriated \$75,000 for improving navigation along the Ohio and Mississippi Rivers by removing sandbars, snags and other obstacles. The Corps was also tasked with that work, and so began the Corps of Engineers' continuous involvement in civil works and our Nation's water resources.

As areas along the Nation's rivers and deltas were developed for agriculture and commerce, flooding and associated flood damages became a major concern. The Mississippi River Commission was formed in 1879 primarily to promote navigation, but also in acknowledgment of the need for flood control. Major floods in the Mississippi River basin in the early 1900's resulted in a new role for the Corps of Engineers—flood control. The Flood Control Act of 1936 led to numerous flood control projects

such as dams, levees, and channels through the 1960's. Many of these projects, particularly the dams and their reservoirs, were multipurpose, providing flood control, hydropower, water supply, navigation, recreation, and fish and wildlife enhancement. The success of flood control projects resulted in extensive development in the floodplains, often placing more people and development at risk. In the 1970's and 80's, as numerous floods exceeded the capacity of some flood control projects and caused extensive damage, it became apparent that better management of the floodplains and a comprehensive strategy for flood control reduction or mitigation was necessary. Today, the Corps now focuses its efforts on reducing flood damages and, where appropriate, moving people out of harm's way.

More recently, the Corps has become involved in environmental protection and restoration. The National Environmental Policy Act of 1969, which requires each Federal Agency to assess fully its actions affecting the environment, and the Federal Water Pollution Control Act of 1972, which gave the Corps responsibility for regulating the discharge of dredged or fill material into all of the Nation's waters, including wetlands, provide basic authority for our work in this area. In addition, specific authorizations for aquatic ecosystem restoration now account for a significant portion of our construction program.

Since the early years of our country, the Corps has always been a dedicated servant of the American people. For 200 years, the Nation has relied on the Corps to help resolve some of our difficult problems. In addition to its water resources responsibilities, the Corps has supported our military forces in time of war. The Corps provided the technical expertise for the Manhattan Project. Army engineers oversaw the building of the Panama Canal. The Kennedy Space Center and the Johnson Manned Spacecraft Center in Houston are products of Corps efforts. When a disaster strikes, Corps personnel in red jackets are there to help.

The distinguished history of the Army Corps of Engineers is the history of our Nation. As the Nation has changed its priorities and values, the Corps has also changed as it brought these priorities to reality.

Given today's world affairs, I believe it's appropriate to say a few words about the Corps' role in the Global War on Terrorism. LTG Flowers will provide additional information about the support by the civilian employees of the Corps, as well as the military, to the fight against terrorism. I would like to acknowledge the important contributions of these fine professionals and their families. I can tell you with absolute certainty that the Administration recognizes the role of the Civil Works Program in winning the war against terrorism.

I would like to discuss each of the three primary missions—commercial navigation, flood damage and storm damage reduction, and aquatic ecosystem restoration—in more detail.

COMMERCIAL NAVIGATION

The commercial navigation mission of the Corps was established in the Survey Act of 1824. Since that time, the Corps has supported navigation needs through the construction and maintenance of ports and waterways across the Nation. The ports and waterways the Corps constructed and now maintains serve the people in 41 States. The system includes 926 coastal, Great Lakes and inland ports; nearly 12,000 miles of channels; and 240 lock chambers at 195 sites. In 2001, nearly 2.4 billion tons of cargo moved through these ports and on the waterway systems. Many components of the waterways system are old, with 145 locks in operation for more than 50 years. The two oldest that the Corps operates are on the Kentucky River, and were opened in 1839. We continue to study and research ways to set priorities, effectively and efficiently maintain, our key facilities, and implement further improvements that will provide a very high return to society relative to their cost.

International trade is a growing part of the Nation's economy, and involves all elements of the Nation's intermodal transportation system. The Nation's ports and waterways can provide reliable and economic alternatives to address projected growth in international trade. Future economic growth in the United States depends on an efficient and effective integration of the various modes of surface transportation, and the Corps' role in these aspects of the Nation's economic development is significant.

Today, our major focus is on protecting this system in terms of maintaining what we have, and investing in what we will need for the 21st century, and also in terms of security from attack. America's ports and waterways are our link to world markets, conveying more than 2 billion tons of commerce each year, and creating 13 million jobs. Increasingly, shippers are using larger vessels to lower costs. Consequently, we're now seeing containerhips that require channel depths greater than 45 feet. As you know, only a few U.S. ports have such depths. We currently have

about 30 harbor improvement projects underway throughout the Nation. Of these, some are proposed to involve construction to depths greater than 45 feet. Altogether they represent an investment of some \$4 billion, funded jointly between the Federal Government and our project sponsors.

We also operate 12,000 miles of inland and intercoastal waterway channel and about 200 locks. The inland and intracoastal waterways move over 600 million tons of cargo annually. Coal is the largest commodity by volume, with the waterways moving more than 20 percent of the coal destined for U.S. power plants. And nearly three quarters of all corn and soybean exports move by inland waterway. Unfortunately, much of our inland navigation infrastructure is aging and in need of repair. Over 50 percent of Corps locks exceed their 50-year design lives. We are striving to maintain and improve this phenomenal system while we protect and restore habitat. This is the 21st Century challenge of smart growth we are committed to addressing this challenge responsibly and effectively.

FLOOD DAMAGE AND STORM DAMAGE REDUCTION

Flooding is the most destructive and costly natural disaster in the United States, accounting for 85 percent of all natural disasters that occur annually. Nearly 400 major reservoirs and 8,500 miles of levees and dikes are under the Corps' jurisdiction. The Corps estimates that, since 1950, this infrastructure has prevented nearly \$500 billion in riverine and coastal flood damage.

Despite its considerable success in flood and storm damage reduction, costs of floods (emergency assistance costs plus property losses) still average over \$4 billion annually. This is due largely to continued development both to flood plains and in urbanizing, upland areas, as well as along our coasts. News coverage of recent flood disasters, including hurricane Isabel, have shown the enormous economic costs of flooding. Unquantifiable social costs include injury and loss of life in some cases, and stress on individuals and families caused by disruption, evacuation, and life in temporary quarters. It also includes loss of irreplaceable property, and destruction of entire communities.

AQUATIC ECOSYSTEM RESTORATION

Our Nation has more than 3.6 million miles of rivers and streams that comprise corridors of great economic, social, and environmental value. These corridors are complex ecosystems that perform vital environmental functions, including modulating stream flow, storing water, removing harmful materials from water, and providing habitat for aquatic and terrestrial plants and animals. The National Environmental Policy Act (NEPA) of 1969, as amended, prescribed integration of environmental protection and social goals with economic ones in the development of water and related land resource management projects. Environmental restoration and protection is the fastest growing portion of the Corps mission portfolio, particularly for riparian and tidal wetlands.

The Corps is an active partner in environmental restoration and protection, and ecosystem restoration is a high priority purpose equivalent to the flood protection and navigation missions. Working with non-Federal sponsors, the Corps implements single purpose ecosystem restoration projects, multi-purpose projects with ecosystem restoration components, or projects for flood protection or navigation that incorporate environmental features as good engineering. The Corps has restored, created, and protected over 500,000 acres of wetland and other habitats since about 1988. In some cases, existing water resources projects are modified to achieve restoration benefits. Dredged material, which used to be considered "spoil", is now considered "soil", and used as a resource to construct or reconstruct aquatic habitats of various kinds. In the Florida Everglades, the Corps, in partnership with the Department of the Interior, the State, and two Indian Nations, will restore and protect over 2,700,000 acres of habitat over the next 30 years. Over 100,000 acres of habitat enhancement and restoration projects are being restored on the Upper Mississippi River System in partnership with five States and the U.S. Fish and Wildlife Service. These are just a few examples. Finally, the Corps has jurisdiction over 12 million acres of land and water resources at over 500 water resources projects across the country and environmental stewardship is a priority. A healthy environment contributes to our economic and national security.

REGULATORY PROGRAM

The Army's Regulatory Program administers permitting under the Rivers and Harbors (Section 10) and Clean Water (Section 404) Acts.

Sections 10/404 permitting, with 100,000 jurisdictional determinations and 86,000 written authorizations annually, and associated complex legal and policy issues

(e.g., SWANCC, Tulloch Ditching, wind energy projects in the Northeast, shellfish aquaculture, mountaintop surface coal mining, and phosphate mining in the Everglades) constitutes the bulk of the Regulatory Program's work and is, in fact, its primary function. These permits, approving diverse activities such as construction of roads, ports, houses, schools, commercial development, energy pipelines, and coal/phosphate/peat/sand/gravel mining, generally require mitigation to offset impacts to aquatic resources.

A staff of about 1,200 people, distributed among 38 districts, 8 divisions, and the Corps Headquarters, carries out this important work. Administering the permitting aspects of the program is labor intensive. Congress appropriated \$139 million in fiscal year 2004 to support the administration of the section 404 program; \$150 million has been requested in the President's budget for fiscal year 2005. These resources are required to process individual and general permit authorizations while protecting aquatic resources, accomplish jurisdictional determinations, conduct appeals of permit denials and jurisdictional determinations, perform compliance activities for mitigation projects, support watershed planning efforts in sensitive environmental areas in accordance with States and local communities, work on various national initiatives involving policy and consistency studies, including initiatives to improve program efficiency and data collection, and to develop proposed regulations and guidance concerning the Clean Water Act.

PRIORITIES OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

We face many challenges as we work with our stakeholders to accomplish the missions of the Corps of Engineers. To move forward, I am focusing my priorities in 3 areas during my tenure in this office. They are:

1. Develop the Civil works budget and manage the program based on objective performance measures. This will greatly help us support goal setting and decision-making. I am a strong believer in performance measurement, and clear programmatic goals will allow us to refine the metrics we rely upon to make the best possible decisions regarding our infrastructure investments.
2. Improve analytic tools to support water resource planning and decisionmaking. While analytic tools must have wide acceptance in the community to be persuasive, the Corps should strive to develop and use the most advanced analytics possible to model the environmental and economic effects of programs and projects.
3. Improve effectiveness of aquatic resource protection and the efficiency of our wetland regulatory program. We need to make the permit reviews and decision-making of the regulatory process more efficient and predictable while maintaining the flexibility to deal effectively with different physical conditions throughout the Nation.

PERFORMANCE-BASED BUDGETING

Performance-based budgeting is one of the President's Management Initiatives. For the Army Civil Works program, performance planning in preparation of the fiscal year 2005 Budget was built around eight program areas: Navigation (including inland waterway navigation and coastal channels and harbors); Flood and Storm Damage Reduction (including damage from riverine flooding and coastal storms); Environment (including aquatic ecosystem restoration, stewardship of natural resources at operating projects, and the Formerly Utilized Sites Remedial Action Program); Hydropower; Recreation; the Regulatory Program; Emergency Management; and Water Supply (storage at existing reservoirs).

The first element in our performance planning is a strategic plan, which is required by the Government Performance and Results Act (GPRA). I am happy to announce that on March 22, 2004, I provided our strategic plan to the committees and subcommittees of Congress responsible for water development authorizations and appropriations, including this subcommittee and committee. The plan is a work in progress. We will continue to work with the Office of Management and Budget to establish program goals, objectives, and performance measures that provide a sound basis for setting performance targets and building future budgets.

Another element in our performance planning is to develop the Civil Works budget and manage the program based on objective performance measures. The fiscal year 2005 budget for Army Civil Works focuses funding on the most productive investments. This is reflected, for instance, in the allocation of funding to the most productive design activities, construction projects, and maintenance activities. At the same time, I recognize that we can do a better job of performance-based budgeting, and one of my priorities is to improve our capabilities in this area. I have placed a priority on making significant progress on refining our program categories and subcategories in the development of sound performance measures for each of

them, and on using the measures to build our fiscal year 2006 budget. A great deal of hard work is in store for us as we transition to this approach, but the advantages are enormous, and the Army is fully committed to this effort.

IMPROVING THE CORPS OF ENGINEERS

Finally, Mr. Chairman, I would like to mention the issue of improving the functioning of the Corps of Engineers.

The Administration looks forward to working with this Committee on authorizing activities of the Corps. We ask that you bear in mind five broad principles to guide future authorizations.

- The Corps should evaluate proposed water resources investments using analytically sound, modern methods, current data and, where appropriate, external review. The Corps should only pursue authorized Federal water projects that meet current economic and environmental standards and that address contemporary needs.

- Until the Federal Government has reduced the construction backlog substantially, the Federal Government should only proceed with those new projects that provide a very high net economic or environmental return to society relative to their cost.

- In each of its three main missions (flood and storm damage reduction, commercial navigation, and aquatic ecosystem restoration), the Corps should establish priorities across and within watersheds based on the comparative net economic or environmental return that a given level of further investment would bring to the Nation.

- In order to focus on the backlog of projects actively under construction in the three main mission areas, the Congress should adopt legislation to de-authorize or disallow funding for: (1) inactive projects automatically; (2) navigation projects for harbors and river segments that have extremely low commercial use; and (3) projects whose main purpose does not fall within the three main mission areas.

- The non-Federal cost-share should reflect the extent to which a water resources project economically benefits commercial interests, property owners, or other identifiable private parties.

This Administration supports the goal of improving the manner in which the Corps plans, designs, implements, and operates and maintains projects and pursues its authorized program. We want to work with the Committee to focus on our three main missions, to pursue only those projects and programs that meet current economic and environmental standards and address contemporary needs, are justified and to improve the ways in which we implement and fund them. I therefore would propose that we focus our attention on the question that lies perhaps on a higher strategic plane: How should the Federal Government's role in water resources policy evolve as we begin a new century? Our continued understanding of this question is critical to setting the future direction of the Corps.

The people of America increasingly understand that our Nation's water resources are finite. The debate over its use classically centers around this question: Where should we give priority to the development of water resources for social and economic benefit and where should we give priority to the restoration of these resources to their natural state? Sometimes we must choose one over the other. Sometimes we struggle to do both. As science and engineering evolve, we can enhance our opportunity to find more balance between these options and, working together, make the right choices for the Nation.

We all agree that the Corps can and should modernize its approach to water resources. But modernization of the Corps needs to be in accordance with the future direction of our national policy.

With your permission, I would like to give you my perspective on the water policy issue. Here are just a few of the facets of the issue. Our society is growing more complex. We have competing interests and disputes in many watersheds in the Everglades, along the Missouri River, the Mississippi River, the Columbia River, and many others. These interests and disputes are intensified when we experience drought conditions as severe as we have now over much of the country.

As members of this important committee, you are more aware than most that many Corps navigation projects have extensive maintenance and repair backlogs.

While advances in science and technology can move us toward a new paradigm of more environmentally sustainable projects and integrated water resources management, we must develop more effective public policies built on a new public consensus for building and constructing our projects.

The concept of requiring a peer review is something that should be addressed. We are supportive of requiring outside independent peer review of certain Corps projects. Peer review, where appropriate, would be a very useful tool and add sig-

nificant credibility to the Corps project analyses and to our ability to judge the merits of a project.

In terms of our Nation's priorities, the war on terrorism is, and should be a primary focus. We must prioritize our resources to ensure that we win this war. We must also ensure that we are looking out for the Nation's long-term economic and environmental future. Corps investments have helped to make our country's economy strong. At the same time, we also need to protect and sustain our Nation's natural resources. Our financial resources are not unlimited. We therefore must address the following questions: What water resources investments do we most need to make now? To what extent should these be a Federal responsibility? To what extent should the Corps have this responsibility? Which investments should we not undertake until later? What can we do without? Can we afford to build all on-going projects simultaneously? Should we continue current cost sharing practices? If not, how should we revise current law? Should we continue to operate, maintain, and rehabilitate every investment that we have made in navigation?

This Administration has insisted on strong coordination, collaboration, and cooperation among agencies within the executive branch and wants to work closely with you on the plans and policies we should put in place to address these long-term needs. The Corps professionals' body of knowledge on water resources is unparalleled. They stand ready, with that knowledge and associated skills, to ensure that the Federal Government can continue to meet the needs of its citizens.

CONCLUSION

I appreciate the opportunity you have given me to testify before this distinguished committee, recognizing that your knowledge of these subjects far exceeds what I have been able to learn in these past few months. I believe we have an opportunity, working together, to help shape the Nation's future. As you know better than I, these are serious times and it is often hard to concentrate on the long term when the more immediate becomes urgent. I pledge to work with you on these important issues to achieve a national water policy that serves the best interest of all our citizens.

Mr. Chairman, this concludes my statement, and I would be pleased to address any questions that you or the committee may have.

RESPONSES BY HON. JOHN PAUL WOODLEY, JR., TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. Do you think that there are some things that we could do in WRDA that could bring the talents of the Corps to bear on the some of these other needs of the Defense Department?

Response. I believe that the Corps and DOD have all the authorities necessary to utilize their talents in a cooperative manner in this area, when requested. Continued support for the programs and projects within a WRDA will allow the Corps to continue to provide water resource services to the country while maintaining its expertise that can and is being used to support the war fighter on the ground today in Iraq and throughout the Department of Defense.

Question 2. What sort of performance measures do you advocate to ensure that ecosystem restoration achieves measurable benefits?

Response. We recently released the Civil Works Strategic Plan for Fiscal Years 2004–2009. One of the five strategic goals for the Civil Works program is to repair past environmental degradation and prevent future environmental losses. Pursuant to that goal, one objective is to “restore degraded, significant ecosystem structure, function, and process to a more natural condition.” The associated performance measures included in the Strategic Plan are acres and/or river miles of habitat restoration completed and acres/river miles of nationally significant habitat restoration completed per dollar invested. We will continue to develop other performance measures, as we formulate the fiscal year 2006 budget and gain more experience in this complex area of analysis. In addition to cost effectiveness, other critical considerations include the quality of the habitat restored and its relation to other activities in the watershed and nation. The Corps staff have developed eight factors that will be used initially to address these issues: Special Status Species, Scarcity, Connectivity, Significance of Plan, Level of Contribution to the Plan, Additional Tangible Support, Reliability and relative Operation and Maintenance costs.

Question 3. Do you anticipate that you will distribute guidance to Corps district offices in the near future to clarify the Corps' jurisdiction over navigable waters?

Response. The Corps currently is in the process of identifying practices employed for making jurisdictional determinations across the Nation and will inventory, assess and determine any differences in practices due to regional and environmental factors. The findings may be used to develop and provide internal policy guidance to enhance consistency for making Clean Water Act jurisdictional determinations.

RESPONSES BY HON. JOHN PAUL WOODLEY, JR., TO ADDITIONAL QUESTIONS
FROM SENATOR BOXER

FOLSOM DAM

Question 1. Please explain in detail what you have been instructed to do and who issued the instructions.

Response. With respect to fiscal year 2004, we are using the funds appropriated for the project in accordance with the instructions in the committee reports accompanying the fiscal year 2004 appropriation bills. With respect to fiscal year 2005, the advice and counsel leading up to the recommendations that form the basis of the President's Budget are part of the internal deliberative process. Similar to the pre-markup activities of any Congressional committee, the initial views and positions within the executive branch vary widely relative to the final outcome in the President's Budget. In order to assure the President the full benefit of advice from the agencies and departments, the Administration treats this as pre-decisional, internal information.

Question 2. With funds provided by Congress for fiscal year 2004, what actions are you currently taking to advance the Mini-Raise project and what specifically are you doing with those funds regarding the new bridge?

Response. We have initiated environmental review, engineering and design for all elements of the project including design of a permanent bridge over the American River. Specifically in regard to the bridge, the Corps is working closely with local stakeholders to plan and coordinate engineering, design and construction of the bridge on an expedited schedule. The environmental evaluation process was initiated on February 6, 2004 and a scheduling workshop was held on February 9th. Additionally, three public meetings were held in early March to further develop an execution strategy for the bridge. Since the March public meetings, we have focused on getting the entire planning and design process underway. These efforts include the establishment of a Traffic Advisory Committee, to provide guidance on traffic studies needed as part of the permanent bridge planning process, topographic surveys necessary to start detailed design of the bridge, and initiation of the Architect/Engineer selection process to select the consultant that will design the bridge and roadway approaches. We plan to expedite the bridge element in parallel with other project elements, which will result in the bridge being the first designed and constructed project feature.

Question 3. How much funding is the Corps capable of using for the overall Mini-Raise project in fiscal year 2005? Of that amount, how much could be used on the new bridge?

Response. The maximum capability estimate for a study or project reflects the readiness of work for accomplishment. It is the most that the Army Corps of Engineers could obligate efficiently during the fiscal year for that study or project. Because each estimate is made without reference to the rest of the Army Civil Works program, these estimates are not cumulative. Civil Works studies and projects compete for funding and manpower. The President's fiscal year 2004 Budget for the Army Civil Works program proposes funding levels that reflect this Administration's assessment of national priorities in view of the many potential uses of Federal funds. Consequently, while the Corps could obligate additional funds on some studies and projects, offsetting reductions within the Army Civil Works program would be required to maintain overall budgetary objectives. Furthermore, the Budget allocates the funding available to the Army Civil Works Program in a manner that would enable the Corps to use funds effectively. Subject to the above qualifications, our fiscal year 2005 capability is \$11,000,000 for the overall Mini-raise project. Of that amount, \$7,000,000 could be used for design of a bridge.

Question 4. For both the Mini-Raise project and the new bridge, when do you anticipate completing design? Executing a Project Cooperation Agreement? Initiating construction?

Response. The fiscal year 2005 budget includes funding for design of flood control features, but not of a bridge. The completion date for preconstruction engineering and design (PED) is not scheduled at this time. However, should sufficient funding

be provided, we could complete PED and execute a PCA in September 2005 and initiate construction in November 2005.

Question 5. What is your schedule for having the new bridge open to traffic?

Response. Design and construction of a new bridge are not scheduled. However, should sufficient funding to continue work on a bridge be provided, a bridge could be open by December 2007.

Question 6. Please explain what efforts you are undertaking to make sure that local officials are full partners in the bridge project.

Response. Over the past 5 months we have crafted a strong, open working relationship with our four bridge stakeholders and potential sponsors—the State of California Reclamation Board, the Sacramento Area Flood Control Agency, the city of Folsom, and the Bureau of Reclamation. Officials from these organizations have been active participants in bi-monthly Project Management Group (PMG) meetings and other special focus workshops and meetings.

Question 7. What priority does the Mini-Raise project have within the Corps of Engineers?

Response. The project is one of 23 preconstruction engineering and design projects included in the fiscal year 2005 budget. It has a high benefit-cost ratio and would increase flood protection to a large metropolitan area currently at risk.

Question 8. What assurances can you give the Committee that the project, including the new bridge, will be expedited?

Response. In accordance with Congressional direction for construction of the Mini-raise project including the bridge, we have dedicated separate but inter-working Project Development Teams (PDTs) to oversee the execution of all facets of these projects and to assure they are expedited. These teams will bring the appropriate resources from within the Corps, other Federal agencies, or the private sector to expedite execution. However, as stated, only design of flood control features is included in the fiscal year 2005 budget.

Question 9. Are all parties, including the Bureau of Reclamation, fully cooperating to expedite this project?

Response. Yes, all parties, including the Bureau of Reclamation, are fully cooperating to expedite this project in accordance with budget and appropriations decisions.

CORPS REFORM

Question 10. Independent Review.—If independent review is to identify problems, ensure integrity in the information provided to Congress, and help restore public confidence in the Corp's planning process, shouldn't an entire project study be subject to review by an independent review panel, rather than just one component of a study?

Response. Proposed studies that focus on a specific project or separable element of a project should be considered for independent review depending upon the complexity and controversial nature of the study. Those projects that are not viewed as complex or controversial may not warrant the extra time delays and cost to the taxpayer and the sponsor. For the most complex and controversial projects, we would want reviewers from outside the agency. The NRC report has an extensive discussion on this subject but recognizes that the agency must be included in all review to maintain communication. The report cautions that this communication must not compromise the review's independence. Also the agency must have its own internal review to determine if the proposed project meets policy requirements and to fulfill its responsibility of making a recommendation to the Administration and the Congress. The review and documentation that the independent reviewers and the internal policy review group provide is essential in securing OASA (CW) and OMB clearance that it meets Administration policy.

For these reasons, I agree with the Chief that independent review should be limited to scientific and technical issues. Administration policy and management should be the agency's responsibility to account for along with documenting how independent review issues were resolved. Overall, the Corps must acknowledge the independent review panel's conclusions and recommendations. This would be accomplished through the agency's documentation of review findings and be a part of the public record on how all issues were resolved. It is the Corps responsibility to resolve all issues before a Chief's Report is signed. Each key point must be addressed and explained how it was incorporated into the decisionmaking process. Where necessary, issues would be rebutted with explanations as to why the agency does not agree. Any independent review program should complement both the existing tech-

nical and policy reviews conducted by the Corps and the reviews conducted by the stakeholders, the public and other agencies.

Question 11. Do you believe that public confidence in Corps studies can be restored if the Corps defines the elements that are to be examined by an independent review panel?

Response. In my view, the key to such a process would be a full and open public involvement initiated early in the study through the draft and final stages of the feasibility report, full disclosure of external and internal reviews, and documentation of review findings that would serve as the basis for the Chief of Engineers final report. A critical issue to the integrity of such a process is who picks the reviewers for an external, independent review so the agency can avoid bias or conflicts of interest. We would envision that a process would be established to draw upon reviewers that have been identified by an outside body, such as the National Research Council or other similar organization. A process that provides for review during the conduct of a study, will allow reviewers to address issues early in the planning process when changes are much easier to accommodate. Conducting review in such a fashion, we believe will minimize the delays and keep costs of review to a minimum. Through such a process, I believe public involvement would be ensured and public confidence restored.

Question 12. Mitigation Requirements.—What steps have been taken to ensure that adequate mitigation is being proposed for new projects being recommended to Congress?

Response. The Corps' policies, guidance and procedures require that we consider the impacts of alternatives as we develop solutions to water resources problems. Our guidance is extensive and includes requirements that we seek first to avoid significant impacts, then work to minimize such impacts so that developing appropriate, adequate and justified compensatory mitigation begins to occur only after other options have been evaluated. Therefore, the fact that only 31 percent of the projects that received appropriations from Congress required a fish and wildlife mitigation plan is a positive outcome. The GAO report was clear that the remaining proposals did not require a mitigation plan; thus, none was undertaken. We view the fact that 70 percent of the proposed projects presented to Congress for authorization and funding did not require compensatory mitigation as a demonstration that we avoided significant impacts by the development of suitable alternatives.

All projects recommended to Congress for authorization and funding present the results of the detailed environmental and other analyses and in accordance with Section 906(d) of the Water Resources Development Act of 1986 any necessary compensatory mitigation. Our guidance is updated and revised as needed to reflect state-of-the-art and emerging methodologies for analysis. Nevertheless, our overall policies with regard to identifying needs for mitigation are sufficient to guide planning and project development so that any significant impacts are properly mitigated. Our Civil Works Strategic Plan and our own Environmental Operating Principles further demonstrate our commitment to protecting and restoring environmental resources, and to achieving environmental sustainability in the actions we undertake.

On March 26, 2002, the Chief of Engineers reaffirmed the Corps of Engineers' commitment to the environment when he presented the Environmental Operating Principles as a guide for all of Corps works and an integral part to all its decision-making and programs. The Corps formalized the requirement and procedures for implementation and integration of "Environmental Operating Principles" in all Corps projects and programs in a recently published regulation. The EOP mandate proactive and comprehensive consideration of the effects of Corps actions on the air, water, and land resources of the environment and directs all Corps members to seek better ways of achieving environmentally sustainable solutions.

Question 13. How can the Corps properly calculate the cost of a project if it does not have a detailed mitigation plan—outlining lands to be acquired, the specific work to be undertaken, and the monitoring to be carried out—when it is preparing its cost estimates?

Response. Because our guidance and procedures do require that a detailed mitigation plan be developed if it is not possible to avoid environmental impacts, we do in fact have the information necessary to prepare detailed costs estimates. When we propose a project for Congressional authorization, we present that detailed cost estimate in the recommendation. Our analysis of the mitigation requirements is based on the best science and methodologies available to us, as well as, the recommendations of the Fish and Wildlife Service. Should subsequent information show the need to revisit the project design and modify it, we then recalculate the costs (for whatever reasons, including mitigation). As necessary to comply with the WRDA author-

ity and limitations for cost increases, we would then report such cost (and design) changes to Congress. Any proposal forwarded to Congress without a detailed fish and wildlife mitigation plan is a proposal to implement a solution that requires no mitigation.

Question 14. What steps is the Corps taking to ensure that it will meaningfully consider the comments of other Federal agencies, including any opposition to proceeding with specific Corps projects? Does this extend to revising recommended alternatives?

Response. The Corps has very open and transparent planning and evaluation processes. Furthermore, the results of the formal review processes with other state and Federal agencies, many required by law (NEPA, ESA, FWCA, e.g.), are included in every report to Congress as part of the formal documentation. Our responses to all comments, including any dissenting comments or opposition to our conclusions, are presented in the final report. While there may be disagreements with the conclusions, the explanation and justification for the decision to accept or reject comments of others are always part of the record. Thus giving meaningful consideration to the comments of others, which is part of our procedures, does not mean that we always accept those comments and change the decision. We do provide our analysis to justify our decision to accept or reject comments, but those decisions are based on the scientific and technical evaluations we conduct.

Almost all of our proposals have a cost-sharing partner, representing the local community, and working with us in seeking solutions to problems. Generally speaking, the process of identifying and evaluating solutions to water resources problems is an iterative one and ultimately consensus-driven by local decisionmakers. We take into account the views and comments of others, not only the partners, but also the coordinating agencies and the public. We respond to the comments received as part of the coordination process and at public meetings and workshops. Summaries of all those processes as well as the categories of comments are also part of the documentation presented when the proposal is ready for authorization or approval.

RESPONSES BY HON. JOHN PAUL WOODLEY, JR., TO ADDITIONAL QUESTIONS
FROM SENATOR JEFFORDS

Question 1. There are surpluses in both the Harbor Maintenance and the Inland Waterways Trust Funds, trust funds that are paid into by the users of our ports and inland waters. Please explain why operation and maintenance needs are going unmet when the money intended to pay for the maintenance sits in the trust fund?

Response. Senator, annual expenditures derived from both trust funds are limited by amounts appropriated for inland waterway projects in the Construction, General account, and for harbors in the Operation and Maintenance, General, account in our annual Energy and Water Development Appropriations Acts. Fifty percent of inland waterway construction costs and 100 percent of harbor maintenance costs are derived from the respective trust funds.

Question 2. The Corps is currently restudying a proposal to expand the locks and dams on the Upper Mississippi River. Two panels of the National Academy of Sciences have concluded that the Corps is using inflated estimates of project benefits, including unrealistic traffic forecasts and economic tools that underestimate the impact of rising barge costs on the decisions of shippers. Despite these findings, is the Corps going to recommend a lock and dam expansion on the Mississippi River?

Response. The feasibility study is entering an important phase. Currently the Corps has produced a draft report, which is undergoing a public and agency review. The draft feasibility report includes the evaluation of a number of navigation and ecosystem restoration alternatives. Alternatives under consideration involve up to almost \$2.5 billion in navigation and \$5.3 billion in ecosystem restoration. While the feasibility report includes a tentatively selected plan, a recommendation would not be made until the public review period is complete.

With regard to your concerns about the potential navigation improvements, I would like to expand on my position. The Corps has considered certain non-structural and structural potential solutions. The nonstructural measures include the use of switchboats, congestion fees, and excess lockage fees; while the structural measures include additional mooring buoys, lock extensions, and new locks.

To compare these navigation options, instead of identifying a single estimate or band of estimates of the likely future demand for waterborne transportation, the study relies upon several scenarios of future demand without assigning relative probabilities to their occurrence. Likewise, the study calculates benefits using assumed elasticities of demand for the use of the waterway.

In summary, the Corps has taken the suggestions and recommendations of the National Research Council (part of NAS) very seriously and has restructured the draft feasibility report. The Corps cannot make any final recommendation until the public review period is complete and any concerns or issues identified by the public have been fully considered in the decisionmaking process.

Question 3. You have testified that you support independent review of costly or controversial Corps projects. Would you support the creation of an Office of Independent Review outside the Corps? What role, if any, should the National Academy of Sciences play in selection of reviewers? Should reviewers be permitted to determine the scope of review?

Response. I would support independent review of complex or controversial projects. Because these proposed projects must result in a Report of the Chief of Engineers and a Secretary of the Army report to OMB and the Congress, I feel it is essential that the Chief's office and my office, must continue to provide the documentation of policy review but also to integrate the results and resolution of issues arising from any external independent review. The Chief's Report is the critical document that provides the policy and technical basis to recommend a Federal water resources project to OMB and the Congress. This report must present the results of all internal and external review that a particular study may have experienced. The Corps has the experience to accomplish this and capability to provide arm's length contracts for external review. I agree, a key role could be played by organizations such as NAS in facilitating the availability of outside independent experts to provide such external review. I believe the scope of work should be developed by the Corps to keep the study on track and used to secure technical external review through a number of external sources such as NAS.

Question 4. Please explain why the Office of Management and Budget is taking such a hands-on approach to selecting engineering plans, changing cost-benefit numbers, and pre-selecting alternatives under the NEPA statute? In addition, are you at all concerned that your current process could be inconsistent with the requirements of NEPA?

Response. Senator, I cannot agree with your characterization of the role of the OMB budget examiners. They and many others are involved in the management and allocation of scarce resources, which requires involvement with agencies proposing commitment of Federal funds. That's what public policymaking is all about. With regard to compliance with the requirements of NEPA, I am confident that our current process is not only in compliance with NEPA, but the many other laws under which the Corps studies are developed and processed to Congress for authorization.

Question 5. Thirty-five million dollars are allocated in the President's Budget to the Assistant Secretary of the Army's office for use in "emergencies." This is an unauthorized program with no guidelines for distribution for funds. The Corps has a defined emergency response program in accordance with existing authorities. What is the \$35 million for? Are you seeking authority from this Committee for this program, and how do you propose to spend these funds should Congress appropriate them?

Response. The emergency reserve fund would consist of Operation and Maintenance funds set aside for high-priority, unexpected, and urgent needs for critical maintenance and repairs at key facilities. The intent is to ensure that scheduled high priority work can be accomplished without disruption in the event that additional, unexpected priority needs arise. The reserve fund would be the reprogramming source of last resort. Any reprogramming would be undertaken within existing authority. The Assistant Secretary's involvement is to ensure that the reserve fund would be used for the highest priority unexpected needs. Guidelines for the distribution of funds will be developed early in fiscal year 2005.

Question 6. Local sponsors have repeatedly in the past, and most recently since the 2002 hurricane damages, brought to our attention the need for Federal funding of \$467 million for the construction of the Morganza to the Gulf of Mexico Louisiana project. The project's total cost of \$719 M is to be shared by the local sponsor in the amount of \$252 million. This cost share arrangement, 65 percent Federal to 35 percent Non-Federal, considering the project's benefits and compassion in protecting over 120,000 U.S. citizens and 1700 sq. mi of unique ecosystem, seems a sound investment. What assurances and guarantees does the Federal Government have from its potential local sponsor partners?

Response. Letters of Intent to cost-share construction, design agreements, and a ¼ cent sales tax, which was adopted by a vote of the citizens of Terrebonne Parish.

Question 7. Is there Non-Federal funding?

Response. The state of Louisiana had dedicated \$12M to Morganza to the Gulf through their Capital Outlay Program. In addition, the State has \$4M available for Terrebonne Levee and Conservation District (TLCD) to use in advancing the Morganza to the Gulf Project. LA DOTD has also requested (Dec 2003 letter) that USACE accept a \$2M cost sharing advance for project design. TLCD generates approx. \$4M annually from the Parish $\frac{1}{4}$ cent sales tax dedicated to the Morganza to the Gulf Project. TLCD has \$6M of this tax collected, drawing interest and available for expenditure. TLCD is also advancing the non-Federal Work-in-Kind efforts ahead of project authorization. They have acknowledged that this is at their own risk, but feel that advancing the project is vital to the community. They are hopeful that Congress will allow credits for all work integral to the project, once authorized.

Question 8. If so, what amount, and is it dedicated?

Response. See above. All non-Federal funds identified are dedicated to Morganza to the Gulf.

Question 9. How does this project compare with other WRDA projects relative to availability of local funds?

Response. This project will compare favorably based local funding support. We are not aware of any other projects in prior WRDAs or the draft WRDA in the project area that would be competing for these local funds.

Question 10. Do other projects seeking construction authorization have dedicated Non-Federal Funds in place?

Response. State funds are not typically dedicated prior to Construction Authorization. Early dedication of these funds to the Morganza Project indicates a high level of support by the State Legislature. In addition, the Terrebonne Parish sales tax will increase the level of State-wide support. Local communities that bring funds to the table as a voluntary contribution to the State's cost-share give their project a priority when competing for State funding.

STATEMENT OF LIEUTENANT GENERAL ROBERT B. FLOWERS, CHIEF OF ENGINEERS,
ARMY CORPS OF ENGINEERS

Mr. Chairman and Members of the subcommittee: I am honored to be testifying before the subcommittee today, along with the Assistant Secretary of the Army (Civil Works), the Honorable John Paul Woodley, Jr., on the role of the U.S. Army Corps of Engineers in meeting the nation's water resources needs.

INTRODUCTION

The Army Corps of Engineers is prepared for the challenge of public service. Since 1775 the Army Corps of Engineers has honorably served the Army and the Nation. During the 20th Century the Army Corps of Engineers experienced both resounding success and dramatic controversy. Today in the 21st Century we are responding to the scrutiny of the public we serve. I welcome this challenge.

The Army Corps of Engineers traces its origins to the construction of fortifications at Bunker Hill in 1775. For 229 years, the Corps has responded to the needs of the Army and the Nation.

The mission of the Corps has evolved from that of "builder" to the roles of "Developer/Manager" and "Protector" of water resources.

What began as a military engineering mission for Nation building in the 18th century expanded into a major peacetime mission in the 19th Century. The Corps helped a young Nation map the frontier and expand westward by surveying roads and canals. The Corps promoted economic development through a vast water resources infrastructure, contributed to development of the first national parks, tied an inland navigation system together to move commerce across states and opened ports and harbors critical for national defense and international trade. In the 20th century Congress provided the Corps with additional water resources development and management authorities including flood control, hydropower, water supply, and recreation. More recently, Congress expanded Corps authorities to storm damage reduction, response to natural disasters and aquatic ecosystem restoration. Our Civil Works program has changed along with society's changing needs, values, and priorities for good water management. For example, the Water Resources Development Act of 1986 emphasized the national expectation that project partners be more involved in the formulation and financing of solutions to water resources problems. Nearly everyone believed that we could develop better projects more efficiently and effectively by recognizing that projects must meet national needs and work viably

at the local level. The history of the last 15 years of the 20th Century demonstrates that we responded to this direction and the Nation's needs.

Today, Mr. Chairman, under your oversight, the Corps is involved in the development, management, and protection of water and related land resources through its commercial navigation, flood and storm damage reduction, and aquatic ecosystem restoration projects. The Civil Works program not only provides stewardship of water resources under our jurisdiction and implements important regulatory authorities, but also is authorized to provide emergency services in response to natural disasters. It is my job, in concert with the Assistant Secretary of the Army (Civil Works), to provide advice to the executive branch and Congress on these matters. As we move forward in the Twenty-first Century I believe that the greatest water challenge facing our Nation is managing our water resources in a fully integrated manner to sustain both our environment and our economy. I'm proud to report that the Corps is prepared and ready for this role.

Integrating the management of our water resources poses some basic questions about how the Nation will use and protect water in the future, some of which may have implications for future Corps activities. For instance, to what extent will water be a mode of transportation? To what extent will it be open for recreation? Our future depends on the direction and focus of our priorities. This direction will also profoundly affect the way we do business in the Corps. Together we need to craft the 21st Century Corps of Engineers, an organization based on contemporary values and future needs. The needs that the Corps addresses—water resources and support to the war fighter—are as critical today as at any moment in history.

Last year, I had the pleasure of testifying for the House Water Resources and Environment Subcommittee with Mayor Bob Young of Augusta, who was testifying as Co-Chairman of the Urban Council. In speaking of the Nation's water challenges, Mayor Young said, "there is lack of recognition of the seriousness of the water supply problem; and, there is a lack of effective planning to use current water resources more efficiently and effectively. The Federal Government can play a lead role in the form of technical assistance to achieve the needed level of planning so that American cities and states, neighboring watersheds, and the network of rivers can be made to meet our economic and cultural needs."

The Corps water resources planning capability is evolving to the new challenges of integrated water management. I am committed to preserving and improving the reliability of our planning and my reports to you. We are proud of our disciplined water resources planning and the professionals who face the daunting challenges of solving real problems, balancing competing interests and forging consensus around solutions within the framework of current law and policy. They serve the public well and very often in the midst of controversy and intense scrutiny. Their difficulties make the discipline of the process of paramount importance. Today, we continue to apply the Principles and Guidelines (P&G) for Water and Related Land Resources. The P&G require a clear statement of and make possible a lucid and logical understanding of the tradeoffs among alternative uses of water. The P&G accommodate formulation of projects to meet multiple objectives such as ecosystem restoration and traditional flood damage reduction and navigation. This framework has empowered the formulation of projects as diverse as the Comprehensive Everglades Restoration Plan as well as improvement to the Ports of New York and New Jersey. As we face the new challenges of integrated water management, the tradeoffs will become even more complex. We must continue to strive for openness and inclusion within the P&G framework to achieve common understanding of the benefits and costs associated with alternative allocations of our Nation's water resources and foster better decisions among these allocations.

TRANSFORMING THE CORPS

I'd like to talk about what I'm doing to transform the Corps into the 21st Century. There are three particular areas that I would like to discuss—reducing the backlog of projects, improving our internal processes and working toward watershed approaches.

Backlog

Frankly, we have too many projects on the books, and some do not address solutions in a contemporary way. The backlog has been the center of discussions at previous hearings of this Committee.

At the end of fiscal year 2005, completing the construction projects funded in the fiscal year 2005 Construction account is estimated to cost approximately \$11 billion in non-inflated dollars. The estimated backlog represents a decrease from last year. The decrease partly reflects a decision to display the backlog in fiscal year 2005 dollars rather than applying projected inflation to the completion costs. The decrease

is also the result of project completions and is based on the decision to not budget for periodic renourishment of shore protection projects.

I also want to address the question of project deauthorization. For some authorized projects, considerable time may elapse after authorization without appropriation of construction funds. Over this time we may see scientific progress that could better address a problem and public policy may shift. We have many inactive projects that technically remain on our books whose designs won't solve the original problems or for which there is no longer support.

There also are projects that would solve certain problems but are unpopular for any number of reasons. Most were authorized years ago but haven't been built. These projects show up on the hit lists of some of our most vocal critics. Sometimes the critics are right. In many cases, I believe that it would be helpful for a principals group of all interested Federal agencies, and in some cases for the Congress, to take a fresh look at these projects.

Internal process

We have been working very hard internally to transform. We are making our processes more open and collaborative. We are working to revitalize our planning capabilities and to become more efficient.

We are becoming a team of teams within the organization, focusing on eight regional business centers, which will move efficiently and deliver service to the public and the armed forces.

We've taken other major steps:

- We have established the USACE Environmental Operating Principles as a clear commitment to accomplishing our work in environmentally sustainable ways and with the express purpose of instilling these principles as individual values in all members of the Corps team.

- As I indicated earlier and critically important in giving life to the Operating Principles, we have issued guidance supplementing application of the P&G that emphasizes the formulation of environmental and economic projects.

- We are continuing a rigorous training curriculum to improve our planning capability. This will ensure that the best science is applied in project development and that our planners integrate economics and ecology in developing Corps projects.

- We must ensure that our planning methods are founded on the best science to support recommendations for water resources projects. We are undertaking needed investments in improving economic models, methods, and tools for all our planning activities but in particular for navigation evaluations. We will update and improve specific models and address issues raised by the Corps and others.

- We have redoubled our efforts to engage Federal, state, and local agencies, stakeholders and the public in meaningful dialog. We have brought the major resource agencies to the table to assist in decisionmaking.

- We have allocated additional resources to strengthen our internal review capability. With restructuring under USACE 2012, we have just created an Office of Water Project Review in Headquarters effectively doubling the size of our policy compliance review staff. The goal is to have our economists, plan formulation specialists, and environmental reviewers focus on early involvement in study development to assure compliance with established policy as projects are being developed. Additionally, this new office is overseeing administration of external independent review on controversial and complex projects through contracts with outside experts.

- We have established 5 national planning centers of expertise that will be staffed with some of our best engineers, scientists and economists—a step that is essential for successfully addressing the issues that increasingly arise in planning a water resources project, especially those that are costly, complex, or controversial, or which otherwise require very specialized planning work. Our five national planning centers are designated to lead each of the following areas of expertise (1) inland navigation systems analysis, (2) coastal and deep draft navigation, (3) flood and storm damage reduction, (4) ecosystem restoration and (5) integrated water resources management.

- I have also revitalized the Environmental Advisory Board, a board of independent, external environmental advisers that will help us evaluate our process. They have advised us on our Upper Mississippi River Navigation study and will also be looking at peer review, cost sharing, breadth of authority and reviewing our work in the Everglades in the upcoming sessions.

We're committed to open and transparent modernization of the Civil Works Program for the 21st Century. To this end, we're committed to continuing the dialog. Additionally, I have issued communication principles to ensure open, effective, and timely two-way communication with the entire community of water resources inter-

ests. We know well that we must continue to listen and communicate effectively in order to remain relevant.

Watershed Approach

In many instances, we have reaped immense benefits from collaboration and partnership within the Federal Government and within our local project sponsors. These partnerships will serve us well as we move toward a watershed approach. Here are a few things I've done:

On March 22, 2004, a new Civil Works Strategic Plan was provided to the committees and subcommittees of Congress responsible for water development authorizations and appropriations, including this subcommittee and committee. The plan emphasizes the sustainable development, management and protection of our Nation's water and related land resources. I believe that we need to do this through a holistic watershed approach. We have already established watershed principles and published watershed guidance for our field offices.

Some recent watershed management efforts, such as the Comprehensive Everglades Restoration Plan, already promote active participation of all interested parties in planning and decisionmaking. A similar effort is Louisiana Coastal Area ecosystem restoration project where a Regional Working Group has been formed to exchange ideas. Quite frankly though, we need to do more and we need the Congress's help if we are truly to take a watershed approach on more of our projects.

Right now, existing laws and policies drive us to single focus, geographically limited projects. The current approach narrows our ability to look comprehensively and sets up intra-basin disputes. It also leads to projects that solve one problem but may inadvertently create others. Frequently we are choosing the economic solution over the environmental when we can actually have both. I believe the future is to look at watersheds first and then evaluate and design projects consistent with the more comprehensive approach. We know that will require collaboration early and continuously but we believe it will prevent problems later.

Conclusion

Transformation of the Corps won't be easy, but we stand ready to work with you to address these issues. As our critics continue to offer constructive advice, I would ask that they work with us as well the Congress, the Administration, other interest groups and our partners and stakeholders, for the well being of the American people and the environment in which we live.

THE NATIONAL ECONOMY AND DEFENSE

Water resources management infrastructure has improved the quality of our citizens' lives and supported the economic growth and development of this country. Our systems for navigation, flood and storm damage reduction projects, and efforts to restore aquatic ecosystems contribute to our national welfare. The stream of net benefits, realized as reduced transportation costs, avoided flood and storm damages, and improvements in environmental value can be considerable.

Civil Works Program research and development provides the Nation with innovative engineering products, some of which can have applications in both civil and military infrastructure spheres. By creating products that improve the efficiency and competitiveness of the nation's engineering and construction industry and providing more cost-effective ways to operate and maintain infrastructure, Civil Works Program research and development contributes to the national economy.

The Civil Works Program is a valuable asset in support of the National Security Strategy in that it provides a way to maintain a trained engineering work force, with world-class expertise, capable of responding to a variety of situations across the spectrum of national defenses. This force is familiar with the Army culture and responsive to the chain of command. Skills developed in managing large water and land resource management projects transfer to most tactical engineering-related operations. As a byproduct, Army Engineer officers assigned to the Civil Works Program receive valuable training, in contracting and managing large projects.

Over the past year, about 1,000 Corps civilian volunteers have deployed to Iraq, Afghanistan, and elsewhere in support of our Nation's efforts in the war against terrorism. They are involved in every aspect of rebuilding these nations and establishing the conditions for democracy to flourish. The work is vitally important and, quite often, dangerous. In fact, several Corps civilians have been wounded and several of our contractor partners have been killed. Our Civil Works team has responded magnificently and is performing indispensable work. We're fortunate to have such talented and dedicated professionals to call upon and we're so grateful for their service.

In Iraq, we have been deeply involved in the restoration of the Iraqi Oil industry. Our involvement has helped ensure that more than 268 million barrels of crude oil have been exported, resulting in more than \$7 billion being returned to the Iraqi economy. This income is forming the basis of the emerging national economy in Iraq, with much of the profit being reinvested in restoring Iraqi infrastructure. We are also assisting in the procurement of refined oil products in Iraq, which are essential to every day life in Iraq.

The Corps is proud to have worked closely with the Coalition Provisional Authority (CPA), U.S. Agency for International Development, and the Iraqi Governing Council in restoring reliable electricity throughout Iraq. When it became obvious that years of neglect and sabotage had brought the Iraqi electrical power production and transmission to near collapse, the Corps, working with the CPA and USAID exercised its time-proven civil emergency response capabilities and provided a much-needed boost to electricity delivery across Iraq. We continue to assist the CPA and USAID in electrical power production and distribution, and today, the average Iraqi has greater access to electricity than he had before the war. No longer is access to electricity a measure of loyalty to the Iraqi regime.

The Corps is also playing a major role in securing and making safe the more than 600,000 tons of former regime munitions spread across Iraq through our Captured Enemy Ammunition mission. As of February 10, 2004, 350,000 tons of captured enemy ammunition had been secured and protected from the hands of saboteurs and terrorists. Another 43,000 tons has been destroyed. This mission is vital to the safety of our soldiers, coalition partners, and innocent citizens of Iraq, as it helps deny terrorists access to raw materials they need to make weapons and explosives.

We are also contributing to the continuous improvement of the safety and quality of life for soldiers, sailors, airmen and marines in both Iraq and Afghanistan as we continue to construct and upgrade their living and working areas. In Afghanistan, we are also working with the USAID and the Ministry of Transportation as they restore the infrastructure necessary for a prosperous Nation.

CONCLUSION

Throughout my career I have been privileged to work with the outstanding men and women who make up the Army Corps of Engineers. I am making the changes necessary to ensure the continued integrity of the Corps Civil Works program, so that the Corps can continue to fulfill its role in helping to address many of the water resources needs of this great Nation. I view our current situation as an opportunity. This is an opportunity for us to see ourselves anew and rededicate ourselves to our principles.

Mr. Chairman, this completes my statement. I am prepared to answer your questions as well as those of other members of the Committee.

RESPONSES BY LIEUTENANT GENERAL ROBERT B. FLOWERS TO ADDITIONAL QUESTIONS FROM SENATOR BOXER

Question 1a. What is your position on independent technical review?

Response. My position is that independent review should be limited to scientific and technical issues and be utilized on only complex or controversial studies. Those projects that are not viewed as complex or controversial may not warrant the extra cost and delays to the taxpayer and the sponsor. Our experience with external, independent review thus far is that it can be very costly and involve a significant amount of time.

Question 1b. Can this be accomplished in such a way as to avoid significant impacts to schedules and costs?

Response. We would be concerned about delays and additional costs that could accrue to projects that may not be controversial or particularly complex. The NRC recognized that not all projects require extensive external, independent reviews and called for a tiered approach to assure soundness of decisionmaking without major disruption of the project development process.

But, for complex and controversial projects, I can see the benefit of such input. The Chief of Engineers Report is the vehicle that Army and the Administration use in developing their position. It is critical that the review process provide early input to the Chief in the preparation of this important report. For those studies subject to external review, I believe that such independent review input should be given equal consideration and those issues identified would need to be fully addressed by the Corps. A process that provides for review during the conduct of a study, would allow reviewers to address issues early in the planning process when changes are much easier to accommodate. It must acknowledge the independent review panel's

conclusions and recommendations. This would be accomplished through the agency's documentation of review findings and be a part of the public record on how all issues were resolved. Any independent peer review program should complement both the existing technical and policy reviews conducted by the Corps and the reviews conducted by the stakeholders, the public and other agencies.

With experience and the development of improved procedures for establishing review panels, the cost can be reduced but they will still add to the overall study cost. For the most complex and controversial projects, we would want independent reviewers from outside the agency. Also the agency must have its own internal review to determine if the proposed project meets policy requirements and to fulfill its responsibility of making a recommendation to the Administration and the Congress. The review and documentation that the independent reviewers and the internal policy review group provide is essential in securing OASA (CW) and OMB clearance that it meets Administration policy.

Question 2a. What is the ability of the Corps in offering data/technical support and assistance to State and local governments?

Response. There are a number of ways the Corps can provide data, technical support, and assistance to States and local governments. The Corps has a generic authority to provide Planning Assistance to States under Section 22 of WRDA 1974, as amended. This authority allows the Corps to provide technical assistance to support state, territories and tribal preparation of comprehensive water and related land resources development plans, including watershed and ecosystem planning. We can also assist in conducting individual studies supporting these plans.

Assistance can be provided at the request of non-Federal entity and upon availability of Corps expertise. Special considerations include:

- a. Technical services, rather than grants, are provided without charge or cost sharing.
- b. Nationwide annual funds may not exceed \$10 million, with not more than \$500,000 in any 1 year on any non-Federal entity.
- c. The Corps can provide assistance to state and local governments in disaster preparedness, response and recovery efforts.
- d. Section 22 cannot be used to supplement other ongoing or pending efforts, or to offset required state contributions to Federal grant programs.

As state and local water planning and implementation efforts expand, interest among state and local governments is also growing in more specific projects for technical assistance. Section 22 offers a broad authority that could be useful.

Question 2b. Are there limitations to this?

Response. The main limitation is a \$500,000 per state limit. As states and local governments have begun to meet the challenges of sustainable water supplies through water planning, interest is growing in the technical assistance capabilities of the Corps. States like Texas have asked the Corps to be involved in their regional water planning groups and other states are following suit under similar, legislated water planning mandates. State and localities also foresee that Corps technical assistance will value to help them implement state water plans. Demand for this assistance will grow at two levels of need. The first level is for the Corps to be an active participant in state and local activities in preparing water management plans. The Corps makes every effort to be responsive to requests for our participation as advisors to water planning groups. These requests are growing and our capacity to assist in this manner will be limited by reasonable overhead charges. Meeting these demands could require consideration of authority to fund such activities.

Question 3. Does the Corps have a strategic plan to address the ever-increasing water and water-resources related needs facing our Nation?

Response. The Corps Civil Works Strategic Plan was released in April 2004. To develop the plan the Corps undertook an intensive effort to identify the nation's water resources challenges through extensive public interaction and expert involvement. A discussion of critical water resources challenges is provided in the plan. The Strategic Plan presents a bold initiative for the Corps to manage our Nation's public water resources in collaboration with others through a watershed approach. The watershed approach recognizes that physical, chemical, and biological processes are intertwined and must be managed in an integrated way. As we implement this plan, we will continue to support our primary Navigation, Flood Damage Reduction, and Ecosystem Restoration missions and will work to incorporate watershed principles in developing solutions to water resource needs in these programs to achieve more integrated sustainable solutions as appropriate and feasible. The plan is available at: <http://www.usace.army.mil/inet/functions/cw/hot-topics/cw-strat.htm>.

RESPONSES BY LIEUTENANT GENERAL ROBERT B. FLOWERS TO ADDITIONAL
QUESTIONS FROM SENATOR CORNYN

Question 1. A large percentage of surface water supply storage within the State of Texas is impounded behind existing Corps of Engineers reservoirs. Could you provide information on the potential for the Corps' existing infrastructure to help meet the State's projected 50-year needs?

Response. Sir, over the past few years, the Corps has been working with the Texas Water Development Board to look at ways to leverage the Corps technical expertise to help identify opportunities for modifying the Corps existing reservoirs and infrastructure to aid the State in meeting its 50-year projected water needs that are both cost effective and environmentally sustainable. Preliminary analysis has highlighted the potential to modify existing use of available storage to meet as much as 10 percent of the State's projected needs.

Question 2. The Texas Water Development Board supports an enhanced role for the Corps in helping to implement the Texas State Water Plan. What can the Corps do to help implement the Texas Water Plan?

Response. Sir, due to our water management and development expertise, I believe the Corps could provide technical assistance to help the State implement the Texas State Water Plan. Examples of the type of technical assistance could include review of our existing reservoirs to ensure they meet current day needs; conducting instream flow analysis to ensure adequate water is available to meet environmental needs along the river, bays, and estuaries; and conducting system operation studies to identify methods to efficiently manage available water at Corps reservoirs within a river basin to better meet environmental, social, and economic needs. We also are working with the State and the Regional Planning Boards to highlight potential environmental concerns in the early stages of project implementation to minimize potential environmental impacts of the final recommended local plan. These are only a few examples of how the Corps existing expertise could help the State of Texas and the rest of the Nation meet its future water needs.

Question 3a. At the last count, there are more than 1,800 unincorporated communities, or Colonias, along the Texas—Mexico border. These Colonias are located in economically depressed areas, and do not have adequate water or wastewater infrastructure. Please explain how the Corps currently assists the State of Texas in addressing the basic water needs in Colonias?

Response. Sir, currently under the authority of Section 219 of the WRDA 1992, as amended, the Corps has the authority to provide technical assistance for the Colonias along the Texas—Mexico border to help improve their water and wastewater infrastructure. We have been working closely with the Texas Secretary of State's office, as well as the Texas Water Development Board, and other Federal and local agencies within the region to leverage available funding to meet the needs of these communities. We are currently providing technical assistance to three separate Colonias in Cameron and Star Counties in Texas.

Question 3b. Can the Corps do more to help?

Response. The State of Texas and local communities have stated their interest in the Corps expanding its participation through construction assistance. However, without additional authority, we are unable to meet these needs.

Question 4. The Texas Coast consists of more than 400 miles of some of the most unique and environmentally significant shorelines within the Nation. With the numerous hurricanes and major storms recently experienced, much of these vast shorelines and barrier islands have been eroded impacting both economic development along the coast as well as environmentally sensitive wetlands. Representatives from the Texas General Land Office have stated their interest in identifying ways to protect these significant resources. What is the Corps of Engineers doing to assist the State of Texas in addressing these needs?

Response. Sir, the Corps is currently conducting a feasibility study for the 90-mile reach of the upper Texas Coast from the Louisiana border to San Luis Pass at the western end of Galveston Island. We are proposing to continue studying the potential for Federal involvement in protecting the Texas coast on a reach-by-reach basis. While this is a way to begin identifying potential solutions to the problem, it may not fully solve the problem due to the uniqueness of the Texas coast. We feel a comprehensive study of the entire Texas Coast is prudent to gain a better understanding of the coastal influences, and to establish overall parameters for use in proceeding with future incremental studies.

Question 5. It's my understanding that the Corps has large volumes of data that would be useful to state and local governments and the public. I have been told that

this data, collected for studies and under the wetlands program, are not easily accessible to the public. What could be done about this?

Response. Sir, the Corps has a lot of existing data used to support environmental and project studies that could be a resource for the Nation. However, additional authority and funding would be required to allow us to make this data easily accessible to state and local governments.

RESPONSES BY LIEUTENANT GENERAL ROBERT B. FLOWERS TO ADDITIONAL
QUESTIONS FROM SENATOR JEFFORDS

Question 1. Please describe how the Corps' project development process complies with environment statutes and cost-benefit requirements, particularly the public participation and alternative selection processes in NEPA?

Response. The Corps regulations (ER 1105-2-100, Planning Guidance Notebook and ER 200-2-2, Procedures for Implementation NEPA) contain provisions that address the requirements for cost-benefit analyses as required by the Principles and Guidelines (P&G). They also contain requirements for public participation and alternative analysis and selection as well as compliance with environmental statutes.

Specifically, as the P&G directs, there are 6 steps in the planning process, which lead to recommendation and selection of a project for implementation. The District Commanders and project managers are in constant and close coordination with the non-Federal sponsor along with study and project stakeholders during the entire planning process. These steps are:

1. Identifying problems and opportunities. This problem identification step is typically used to initiate the National Environmental Policy Act regulations (40 CFR Parts 1500-1508) requiring all Federal agencies involved in water resources planning to conduct the process termed "scoping".

2. Inventorying and forecasting conditions. The second step of the planning process is to develop an inventory and forecast of critical resources (physical, demographic, economic, social, etc.) relevant to the problems and opportunities under consideration in the planning area.

3. Formulating alternative plans. Alternative plans are formulated to identify specific ways to achieve planning objectives within constraints, so as to solve the problems and realize the opportunities that were identified.

4. Evaluating alternative plans. The evaluation of effects is a comparison of the with-project and without-project conditions for each alternative. The evaluation assesses or measures the differences between each with- and without-project condition and appraises or weighs those differences.

5. Comparing alternative plans. A comparison of the outputs of the various plans is made. Beneficial and adverse effects of each plan are compared. These include monetary and non-monetary benefits and costs. Identification and documentation of tradeoffs are accomplished to support the final recommendation.

6. Selecting a plan. A single alternative plan is selected for recommendation from among all those that have been considered. The recommended plan must be shown to be preferable to taking no action (if no action is not recommended) or implementing any of the other alternatives considered during the planning process.

This is an iterative process. As more information is acquired and developed, it is often necessary to reiterate some of the previous steps. This is often the result of changed Administration policies, new or amended legislation, new information affecting previous assumptions, or issues raised through our continual coordination with non-Federal sponsors and private and public individuals and agencies.

Public Involvement

The Corps goal of public involvement and coordination is to open and maintain channels of communication with the public in order to give full consideration to public views and information in the planning process. The objectives of public involvement are (1) to provide information about proposed Corps activities to the public; (2) to make the public's desires, needs, and concerns known to decision-makers; (3) to provide for consultation with the public before decisions are reached; and, (4) to consider the public's views in reaching decisions. All this must occur, however, with the awareness that the Corps cannot relinquish its legislated decision-making responsibility. The outcome of any planning is subject to institutional constraints.

The Administrative Procedures Act, (including Section 3, the Freedom of Information Act) and the National Environmental Policy Act (PL 91-190), are among the principal legislative acts requiring public involvement. Federal planning policies, Corps practice, and regulations have consistently required and encouraged open and effective public involvement. Generally, it is impossible to plan effectively for water

resources development in accordance with Federal regulations and laws without open and effective public involvement. Public involvement is integral to all phases and activities of the planning process.

District offices have the primary responsibility for conducting public involvement, coordination, collaboration, and consultation with the public. While local procedures may differ based on regional practices, nationwide requirements are designed to assure that the Corps conducts planning studies in an open atmosphere to attain public understanding, trust, and mutual cooperation, providing the public with opportunities to participate throughout the planning process. In addition, each district office is required to:

Develop and implement an effective public involvement strategy as an integral part of the planning process for each study.

With the cooperation of the non-Federal sponsor, develop and implement an effective management structure to insure that effective collaboration is an integral part of the feasibility study process.

Discuss in the report how information gained from public and sponsor involvement has been used in and influenced the planning process.

Solicit comments on the draft report and environmental document to appropriate Federal and State agencies, cooperating agencies and other members of the public.

Question 2. The President's Budget drastically reduces study funding in the general investigations account. For states like Vermont that have a burgeoning cooperative relationship with the Army Corps of Engineers, this cut has a major impact. Please explain the reduction in the general investigations account. Is this an indication that the Administration is seeking to eliminate the Army Corps of Engineers?

Response. Senator, first let me assure you that the reduction in the General Investigations account is in no way associated with the elimination of the Army Corps of Engineers. Having said that, please understand that difficult choices had to be made with this budget for the Corps. While I would like to have had more, and indeed could effectively execute more, I recognize that there are many competing needs throughout the country and will make the best use of the funds provided. The budget sets the right amount for the Civil Works program, with all things considered.

RESPONSES BY LIEUTENANT GENERAL ROBERT B. FLOWERS TO ADDITIONAL
QUESTIONS FROM SENATOR WYDEN

Question 1. Can you explain the challenge you face in advancing projects under the Continuing Authorities program given current limitations? I understand there are important projects in Oregon that have been stopped by the Corps due to lack of funding.

Response. There are several challenges to face in advancing projects under the Continuing Authorities Program (CAP). A large number of CAP projects have been halted or deferred this fiscal year (FY). This has occurred in all regions of the country, not just in Oregon. The funding appropriated was inadequate for the number and cost of projects to be worked on during the FY. The needs for projects named in the House, Senate and Conference reports were near or exceeded the fund amount appropriated.

Question 2. What would be an appropriate level?

Response. The national funding limits for most CAP sections, as well as limits for individual projects, are insufficient to a large extent for present day costs and requirements. Demand for projects in these programs has increased dramatically in recent years and today exceeds the funding limit of these programs. Furthermore, inflation, since the programs were authorized, has increased the average cost of the individual projects. Since the scope of today's projects is less than they were 10 to 15 years ago and each project represents a larger percentage of the program limit the result is fewer projects being built. Limits set during 1990's could be raised considerably, especially in light of the high demand for Section 14, 206 and 1135 projects.

Question 3. Are you familiar with the March 2003 report by the General Accounting Office (GAO) that concluded that restrictions on the use of the Corps' hopper dredge fleet have imposed costs on the Corps' dredging program, but, thus far have not resulted in proven benefits to the taxpayer?

Response. Yes, I am familiar with the March 2003 General Accounting Office report regarding the restrictions on use of Corps hopper dredges. We are currently analyzing the last 10 years of data to determine the impacts of restrictions on the cost of the dredging program. Until this analysis is completed, it would be pre-

mature to propose any changes in the current operation of the Corps minimum fleet hopper dredges.

Question 4. Given the findings by GAO, shouldn't the current restrictions on use of the ESSAYONS AND YAQUINA dredges be modified to ensure the taxpayer's dollars are used as wisely and cost effectively as possible?

Response. Yes, I am familiar with the March 2003 General Accounting Office report regarding the restrictions on use of Corps hopper dredges. We are currently analyzing the last 10 years of data to determine the impacts of restrictions on the cost of the dredging program. Until this analysis is completed, it would be premature to propose any changes in the current operation of the Corps minimum fleet hopper dredges.

Question 5. What training is the Corps undertaking to prepare for the pending retirements of what is expected to be more than 50 percent of the power grid and power generation operators nationwide? What is the estimated impact on national preparedness?

Response. The Corps headquarters oversees the Power Plant Training Program to ensure that each region maintains a multi-year training regimen that is appropriate and consistent with our national regulations and guidance. Training methods include formal coursework, correspondence courses, computer based training, on-the-job training and use of powerhouse operator simulators. Each of our district offices ensures that we maintain capability in our work force to operate our power plants safely now and into the future. We do not anticipate any impact on our national preparedness.

Question 6. With the Administration's proposed budget cut backs, what efforts are being made to increase efficiencies in training and educational programs?

Response. A United States General Accounting Office (GAO) Report GAO-04-291, "Human Capital, Selected Agencies' Experiences and Lessons Learned in Designing Training and Development Programs" was completed in January 2004. The purpose of the study was to show that effective training and development programs are an integral part of a learning environment, helping improve Federal work force performance in achieving agency results. The Corps was one of five agencies studied by GAO. The Corps has taken the following actions to increase efficiencies in training and educational programs:

The Corps Automated Training Management Program provides a web-enabled integrated data base.—Implementation and use of the Automated Training Management Program (ATMP) has allowed managers to identify division-wide gaps in work force skills and competencies. Using this system (currently in five of eight Corps divisions) employees prepare an Individual Development Plan (IDP) assessing their knowledge, skills and abilities in relation to a series of mission essential tasks. The mission essential tasks begin at the agency level and cascade down through divisions to teams, and eventually to individual employees. This approach enables prioritization of training as it relates to mission accomplishment—and an end to supervisors approving training on an individual basis. With supervisory guidance, each task is identified as critical, important, or beneficial and the employee indicates whether they have received adequate, partial, or no training in that area. With this assessment as a guide, the supervisor and employee can consult the system's built-in course catalog to select internal or external training to enhance the employee's development. In addition, the system also has the capability of aggregating data. This capability provides a simple method for division managers to obtain a picture of the level of skills and competencies in their work force. This information informs decisionmakers on training priorities and helps managers determine the most efficient use of available resources.

Implementation of ATMP provides our Professional Development Support Center (PDSC) the opportunity to receive technical and professional training requirements up to 5 years in advance based upon ATMP's 5-year IDP output. Given this knowledge, we can better place scheduled sessions of technical and professional training in the geographic locations where there is the greatest need and dramatically reduce travel and per diem costs.

Mechanisms are in place to avoid unnecessary duplication or inconsistency within and across agency training efforts.

The PDSC in partnership with the Army Environmental Center (AEC) participates in the Inter-Service Environmental Education Review Board (ISEERB). This body reviews environmental courses for duplication across the Department of Defense. A number of Corps Courses have been recognized by the ISEERB as the approved course for all agencies.

To avoid duplication of training efforts our technical and professional training program is centrally managed and executed by our PDSC. By so doing, the overall cost of such training and development is minimized and the learning opportunities provided can best be linked to the strategic direction and goals of the Command. The intention is to ensure that training resources are controlled and that training, above the local level, is developed, administered and evaluated in accordance with accepted educational standards.

The Corps relies on its Learning Advisory Board and Automated Training Management Program to effectively link planning efforts.—We rely chiefly on the coordination activities of our Learning Advisory Board (LAB) to ensure our work force planning efforts and training needs assessments are effectively linked. We formed the LAB, comprised of senior managers from across the Corps, in 2001, to review the adequacy of Corps training and development and ensure that training is properly aligned with the agency's missions, goals, and plans. In addition, the five divisions that use ATMP can also rely on data from that system to assess training needs. This system allows managers to compare information on individuals' skills and competencies with work force planning results from within the division and across the agency. This systematic comparison more closely links work force planning and training needs assessments to the essential mission-related operations.

The Corps identifies online solutions to help enhance and integrate training efforts.—As a complement to the training and development programs we offer our employees, we recently entered into partnership with the Department of Labor to use their online training and knowledge management system called Workforce Connections. This system, which resulted from a memorandum of understanding promoting cooperative efforts between the Departments of Defense and Labor, will provide our work force with on-demand, online access to job aids, performance support materials, and course content 7 days a week, 24 hours daily. The system will feature development and maintenance of online communities of practice to support knowledge management (Knowledge management is an approach to capturing, understanding, and using the collective body of information and intellect within an organization to accomplish its mission.) on our Learning Network, which is our overall platform for delivering a wide variety of learning resources to agency employees. In addition to contributing to training efficiency, the Workforce Connections tool represents a partnership with the Department of Labor to provide a shared system for integration of training and knowledge management solutions. Another part of the Learning Network is our Virtual Campus, a distance-learning site that allows employees access to web-based courses and training events. The Learning Network also includes electronic performance support tools, such as job aids and other information resources. We consider the Learning Network a powerful tool that effectively integrates the agency's training efforts.

While most of our courses occur in a conventional classroom setting, agency decisionmakers have focused on identifying courses (or modules of courses) to convert from classroom training to more economical modes of delivery, such as distance learning, computer-assisted instruction, computer-based instruction, or a combination of such approaches. Many of our courses now incorporate CD ROM and Internet-based materials as pre-work assignments before attending classroom training and for reference during and after the training events.

For additional information, see the GAO report referenced above, pages 13–14, 23 and 25.

Question 7. Have you made any effort to leverage dollars with key partnerships like the National Guard and local community colleges to conduct any training programs? Can you provide some examples?

Response. Key relationships between the Corps and universities facilitate training and education development and delivery across the organization. Numerous partnerships exist across the organization and others are proposed. The Corps continues to establish partnerships primarily with 4-year institutions and graduate schools for scientists and engineers. Although we have not entered into any formal partnerships with the National Guard for training, our hydropower training programs utilize local community colleges for course work that meets or exceeds our national technical training requirements.

Recruitment and Student Assistance. Informal partnerships across the Corps currently provide for recruitment of technical staff members. Additionally, the Corps operates a Student Cooperative Education Program (SCEP). SCEP agreements are in place with 10 colleges and universities through a partnership with Advancing Minorities Interest in Engineering (AMIE). The SCEP program also benefits the Corps by preparing students for responsible positions with minimal resource allocation.

Specialized Technical Development. Several successful partnerships have been established for development of specialized technical expertise in such areas as Hazardous, Toxic, and Radiological Waste mission; Aeration System design; Water Resource Engineering; Civil Engineering; Computer Science. In addition, we have established Communities of Practice to further enhance specialized technical expertise. The most significant agreement is between the Engineering Research and Development Center (ERDC) and Mississippi State, Louisiana State, and Texas A&M Universities. This agreement serves the advanced educational needs of our employees and the organization and improves the technical competence and professional development of Corps employees. While ERDC provides funds for building maintenance, equipment, and a portion of an employee's salary, the University pays the faculty salary for teaching the courses and associated administrative cost. The agreement is highly cost effective.

In cooperation with the Universities Council on Water Resources, the Corps is managing the Masters Degree in Water Resources Planning and Development. The program has just finished its first full year involving five separate universities. As it grows we plan to include other universities and aggressively involve other Federal, state, and local participants.

Leadership Development. Within the Corps, there are a number of partnerships in place, which support leadership development programs throughout our organization. These partnerships are locally managed and executed to provide maximum benefit to our employees for minimal cost. However, while these partnerships most frequently occur with 4 year institutions and graduate schools because the majority of our employees are highly educated scientists and engineers, we will continue to seek opportunities to partner with local community colleges where their courses of offerings meet the needs of our non-degreed work force.

Professional Partnerships. Our training center offers courses needed to obtain certification for certain professional requirements. Several thousand professional degree-holding employees require continuous education credits for professional certification. In support of this need, the PDSC has current partnerships with the International Association for Continuing Education and Training (IACET), the National Society for Professional Engineers (NSPE), the American Institute for Architects (AIA) and the Project Management Institute (PMI) for provision of continuing education and professional development hour credits for approximately 100 courses in the current inventory. Through these job related programs, the Corps Professional Engineers and Architects have the opportunity to earn the credits required to maintain their professional standing.

Question 8. I understand that the Corps uses Powerhouse Simulators in Tennessee and in Colorado for training powerhouse operators in power grid operations at a cost of \$15,000—\$20,000 per trainee. Given this high cost, wouldn't it make sense for the Corps to conduct training programs in partnership with other entities if comparable training could be conducted at less expense? Wouldn't there be value in having operator training capabilities located in the Columbia Gorge where over 33 percent of the West Coast Power is generated within 100 miles of the Dalles Dam (for example)? What are your current plans to address this strategic concern?

Response. The Corps does make use of the Western Area Power Administration's Power Operator Training Facility in Denver, Colorado. The cost of the training is about \$3,000 per student plus travel and per diem costs for a 2-week stay adding another \$3,500, for a total of \$6,500 per student. The cost is not that prohibitive and makes use of an excellent Government training facility that includes extremely valuable training for emergency situations. Although the largest share of generation capacity exists in the Pacific Northwest, 54 of our 75 plants nation-wide are located east of the Rocky Mountains. Given the reasonable cost, excellent training regimen and central location of Denver, we plan to continue to make use of this excellent training facility.

Question 9. If you agree that there would be value in having partnerships to conduct training for powerhouse operators, why did the Corps put on hold a partnership effort with Columbia Gorge Community College after the College pursued the development of this program to the point of setting aside space, and making a trip with the Corps to Connecticut to spec out the simulator?

Response. Our Portland District office's coordination with the Columbia Gorge Community College and their efforts to address concerns with the Portland District about adequate future training facilities has been greatly appreciated. In the final analysis of the Portland District, the correct course of action is to continue making use of the Western Area Power Administration training facilities in Denver, Colorado. The Portland District does, however hope to continue a partnering relationship with the Columbia Gorge Community College for many other training needs we

have in maintaining an educated, experienced, and talented Hydropower Plant work force in the Pacific Northwest.

RESPONSES BY LIEUTENANT GENERAL ROBERT B. FLOWERS TO ADDITIONAL
QUESTIONS FROM SENATOR ALLARD

Question 1. The Corps of Engineers and the Bureau of Reclamation have undertaken similar projects over the years. Many deal with water supply infrastructure. How would you differentiate your [role] with that of the Bureau of Reclamation, or do you see them as very similar?

Response. Principally, the Corps and the Bureau of Reclamation have had two distinctly different missions relating to serving this country's water supply needs. Traditionally, the Bureau of Reclamation has been the Federal agency that dealt with water supply issues in the western states. The Corps main focus has been on flood control and navigation projects nationwide. However, there is a strong overlap of interests, especially regarding our reservoir project operations where multiple objectives need to be analyzed, weighed, and balanced within the river systems of the Western United States.

The Bureau provides water and distribution whereas the Corps has, in the past, only provided storage space for water and no distribution facilities.

Established in 1902, the Bureau of Reclamation is best known for the irrigation dams, related powerplants, and irrigation canals it constructed in the 17 western states to serve western farmers. Additionally, the Bureau of Reclamation had assisted Tribes with water system infrastructure improvements on reservations.

With recent water management challenges in the West, the Bureau, along with the Corps and other Federal and state agencies, tribal governments, and local communities, has been developing strategies to use irrigation water more than once, satisfying multiple entities (irrigators, municipalities, power users, and environmental interests).

Secretary of the Interior Gale A. Norton has made Water 2025: Preventing Conflict and Crises in the West a key focus for the Department of the Interior and the Bureau of Reclamation. Using that as a springboard, the Corps and the Bureau are developing a Memorandum of Understanding to coordinate the implementation of existing programs in order to maximize the benefits of available resources in preventing conflict and crises over water in the West. Both agencies will use their complementary expertise in water rights, state water law, construction and engineering and their different programs to collaboratively minimize the impacts of water supply shortage conditions in the West.

The Corps, through specific congressional authorizations, has long served communities and governments with Municipal and Industrial (M&I) water system improvements all across the Nation as well as internationally. These mission assignments extend back to the 1850's with construction of the Washington aqueduct and associated water treatment plants and water purification plants. More recent authorizations include both specific and regional authorities for the planning, design and construction of water supply, wastewater collection and treatment systems and recently, wastewater management. Specifics are addressed under the response to questions 4.

Under current guidance, Section 301 of the Water Supply Act of 1958, 43 U.S.C. 390b, the Corps may only include water storage for present or future municipal or industrial water supply as an added feature to a project, which has other outputs, such as a flood control project. The Corps currently does not have general authority vested in the Secretary to carry out a single purpose water quality and municipal water supply project.

Question 2. I mentioned in my statement the Arkansas Valley Conduit, which is a pipeline that will deliver safe, clean and affordable water to the citizens of Southeastern Colorado. Would you care sharing with me some other examples of water supply projects that the Corps is working on that may be similar to the conduit, and that are either authorized or currently under construction? (Senator Allard: You mention the Washington, DC, aqueduct in your opening statement. There is also a pipeline in Oklahoma that has been authorized and may be under construction.)

Response. The administration has consistently held the position that water supply is a local responsibility and as such is not viewed as a high priority output. However, in limited instances across the country, studies under various authorities (such as Planning Assistance to States) have resulted in plans for local interests to implement for water supply purposes. For example, Butler County Water Supply in Kansas, El Dorado Water Supply in Kansas, Parsons Water Supply Study in Kansas, River Basin Water Supply Strategies in Kansas and Dennison & Pottsboro Water

Supply in Texas. Direct congressional language would provide funding and construction authority for the projects. Similar work such as this is also being implemented under the various Environmental Infrastructure programs the Corps is executing in various parts of the country.

Question 3. I am interested to learn more about the working relationship between the Corps of Engineers and the Bureau of Reclamation. Would you please site examples of projects where the Bureau and the Corps have worked together? How has the relationship been structured so that management of the Bureau and Corps projects are coordinated?

Response. As described in an earlier response, the Corps and the Bureau are developing an agreement that will provide a mechanism to promote water basin level staff coordination and collaboration, together and with the States and Tribes to anticipate and meet water supply related challenges in the Western United States.

Section 7 of the 1944 Flood Control Act directed the Corps to work with the Bureau of Reclamation to insure consistency in flood control operations between the Corps and the Bureau reservoir projects. This law requires that if a reservoir project has flood control storage space and the project was built in whole or in part with Federal funds, then the Corps is the agency that specifies how the project will regulate that flood control storage and the resulting flood control releases from the dam. As a result, we have coordinated the flood control operations at Hoover Dam, New Roosevelt Dam in Arizona and other dams built and owned by the Bureau. The Corps and the Bureau coordinated their water control operations on river systems so that the water supply and flood control benefits intended by authorizing legislation are realized.

As stated above, the Corps and the Bureau continually work with other Federal and state agencies, tribal government, and local communities to find better ways to manage the water resources challenges in the West.

As an example, a Letter of Understanding was executed in 1978 defining each Agency's responsibilities in operating Pueblo Reservoir in Colorado. Also, a Memorandum of Agreement for the Bureau of Reclamation's Southern Delivery System, a Colorado project, was signed on April 26, 2004. This agreement defines the Corps role as a cooperating agency with the Bureau in the preparation of the Environment Impact Statement for the project.

There have been cases where the Corps has constructed a project and the Bureau is the owner and operator. The Folsom Dam project is undergoing Corps studies involving raising the dam and increasing the outlet capacity. The Bureau is intimately involved in the Corps study team as part of the Project Management Business Process of the Corps. The Corps and Bureau are partnering together to design modifications to the Folsom Dam on the American River in order to provide flood protection to the Sacramento area. In the Pacific Northwest, the Corps constructed Ririe Dam in eastern Idaho and the Bureau operates the Dam.

Matilija Dam was built and is owned by Ventura County Watershed Protection District (VCWPD) (At that time, the Ventura County Flood Control Protection District). For the current feasibility study, VCWPD is providing in-kind services for the Hydrology, Hydraulics and Sediment Transport Studies effort, and has contracted this work to the Bureau. The Corps is providing the Quality Assurance role for this product.

For the regulation of the Bureau projects where the Corps has the flood control authority, coordination is required between agencies for any deviations from the congressionally approved water control plan. Deviation protocol is established through both Federal law and further defined in Corps Division regulations. For example, the 1983 flooding on the Colorado River required extensive coordination for use of the flood space at Hoover Dam, as both agencies worked at minimizing the flood damages to life and property. Any planned deviations require approval from the Corps Division Commander.

In the Pacific Northwest, the Corps continues to collaborate with the Bureau on a wide array of issues such as water management, flood control and Endangered Species Act issues for Federal Columbia River Power System and related Biological Opinion. Under existing mutual assistance agreements, the Corps provides engineering and technical assistance to the Bureau for flood damage studies, hydro-power support and bridge structural condition assessments.

As part of the coordination efforts for the Corps Section 595 Environmental Water and Wastewater Infrastructure program, described in the response to question 4, the Corps along with all other Federal and state resource providers will insure that the capabilities offered are a wise and effective use of available Federal resources. This coordination includes participation with interest groups involved with rural economic development and interests, and coordination with associations of cities,

Federal congressional liaison and ad hoc focus groups throughout the respective states. The Bureau of Reclamation does not have an authority similar to the Corps Section 595 for Nevada, Montana and Idaho. Where we might see further similarities in missions between the two agencies and the need for partnering is with the newly authorized, but not appropriated, Section 595 rural Utah program and other future work in Utah under the Section 219 program.

Question 4. It is my understanding that the Corps has authority in several states, including the state of New Mexico, to assist with the design and construction of publicly owned water related infrastructure and resource development and protection projects. The assistance is for such projects as wastewater treatment and related facility water supply, conservation and related facilities, storm water retention and remediation, environmental restoration, and surface water resources protection and development. Would you mind explaining a little more about this program and the successes you have had with it?

Response. The Corps has authority in several states, including the state of New Mexico, to assist with the design of publicly owned water-related infrastructure and resources development and protection projects. Public Law 106-53, the Water Resources Development Act of 1999, includes Section 593, which applies to projects in three counties located in central New Mexico, and Section 595, as amended, which applies to projects in rural Nevada, Montana, Idaho, rural Utah, and New Mexico. Section 593 authorizes the Corps to provide design and construction assistance for water-related environmental infrastructure and resource protection and development projects in central New Mexico, including projects for wastewater treatment and related facilities, water supply, conservation, and related facilities, storm water retention and remediation, environmental restoration, and surface water resource protection and development. Three projects have been completed under the Section 593 program, Perizitte, Jude Court, and the Pajarito Vacuum Pump Station. The Double Eagle II construction contract is underway and several other projects are being designed.

Section 595 authorizes the Corps to provide design and construction assistance for water-related environmental infrastructure and resource protection and development projects, including projects for wastewater treatment and related facilities, water supply and related facilities, environmental restoration, and surface water resource protection and development. Section 595 was originally enacted in 1999 for rural Nevada and Montana, and was amended in 2003 by Section 126 of P.L. 108-7 to add Idaho and again by Section 117 of P.L. 108-137 to add New Mexico and rural Utah.

Section 219 of the Water Resources Development Act of 1992, P.L. 102-580, as amended, authorizes the Secretary of the Army to provide assistance to non-Federal interests for carrying out water-related environmental infrastructure and resource protection and development projects including wastewater treatment and related facilities and water supply, storage, treatment, and distribution facilities. The authority under Section 219 is divided into:

Section 219(c)—Technical and planning and design assistance for certain defined projects and locations with a total nationwide authorization specified in Section 219(d).

Section 219(e)—Construction assistance for certain defined projects and locations already mentioned in Section 219(c) with specific amounts authorized for each location.

Section 219(f)—Technical, planning and design, and construction assistance for defined projects and locations with specific amounts authorized for each location.

For example, the largest project of this type is the Los Angeles District Harbor/South Bay Water Recycling, CA project, Section 219(f)(43). In the San Francisco Bay area, the San Ramon Wastewater Recycling is a successful wastewater treatment and water supply project under Section 219 (f)(42).

Other examples include: In Idaho: The FY04 budget included appropriations for the Corps to assist the communities of Horseshoe Bend, Burley, Upper St. Joe, Emmett, Coolin, and Spirit Lake. All of these communities are facing critical treatment or supply challenges due to aging infrastructure. Even though program funding was only received in January 2004, construction of the Horseshoe Bend Wastewater Treatment Lagoon #2 is already underway. Total project cost for this work is \$420,000 and all work is scheduled to be completed this fiscal year. This project is an integral part of the City's effort to correct numerous operational problems at their wastewater treatment facilities.

The success of these environmental infrastructure programs of the Corps partially lies in the expertise available to actually perform the design. We have worked with our many military customers to design and construct water supply delivery, and

sewerage facilities at military bases throughout the West. In our civil works program, we have both the planning and the design capabilities at a number of our district offices, skills that can be leveraged to any location in the Nation because of our regional business center concepts.

STATEMENT OF HON. JOHN T. MYERS, ON BEHALF OF THE NATIONAL WATERWAYS
CONFERENCE, PUNTA GORDA, FL

Mr. Chairman and Members of the subcommittee: My name is John T. Myers of Covington, Indiana. For 30 years, it was my honor to represent the Seventh District of Indiana in the U.S. Congress. I appear before you today as an advocate of enlightened but prudent national waterways policies and programs, particularly those affecting inland waterways. As you begin your deliberations on the next Water Resources Development Act (WRDA), I would suggest that this is not just about the role of the U.S. Army Corps of Engineers in managing our waterway system, but also the value of our waterway system, itself, to the Nation. While we believe that the Army Corps is doing an admirable job in managing our navigation system to the best of their ability, with minimal Federal funds, I'd like to call your attention to several matters that I believe are worthy of your consideration:

I. *Inland navigation is vital to U.S. economic and environmental well-being.* America is fortunate to have such an extensive system of navigable rivers and waterways serving the vast mid-continent—from the coal mines of West Virginia and Pennsylvania and the corn fields of Minnesota and Nebraska to the chemical plants and oil refineries of Louisiana and Texas. Barges are ideal for moving large quantities of farm crops, fuels, chemicals, raw materials and other bulk commodities that support our basic industries. What's more, water transportation is economical, fuel-efficient, safe and environmentally friendly.

To be specific, the inland waterway system totals some 25,000 miles in length. Included are 171 lock sites with 215 individual locks. Overall, our investment in navigation infrastructure is valued at \$125 billion-plus. Every year, this system handles more than 700 million tons of commerce or 16 percent of all intercity freight for 2 percent of the cost. According to the latest Tennessee Valley Authority figures, barge transportation saved shippers an average of \$10.67 per ton of cargo.

Intense competition among water carriers insures that such transportation cost savings are shared by farmers, miners and other producers; by manufacturers and processors, and ultimately by consumers. Thus, inland waterways stimulate the Nation's trade and commerce, the economic vitality of many interior regions, and the competitiveness of exports such as grain and soybeans, supporting tens of thousands of U.S. jobs and incomes.

II. *Lack of adequate investment in the navigation infrastructure threatens U.S. industrial and agricultural productivity.* Locks and dams are getting older every day, and while the Corps is diligently attempting to maintain system reliability, there are currently not enough funds to keep them in good working order. Their design life is 50 years, and a majority of our navigation structures are now over that threshold. In fact, 58 locks are over 60 years old and 35 locks are over 70. And when not properly maintained, these facilities break down. Typically, navigation locks are out of service annually for a total of about 120,000 hours, a figure that has doubled in the last decade. Most is scheduled maintenance but larger and larger percentages of down time are unscheduled. For instance, a major lock gate failure at John Day L&D on the Columbia-Snake River system in 2002 took months to repair. And last year, Greenup L&D on the Ohio River experienced a sudden failure, forcing barges to use a small auxiliary lock, resulting in an average tow delay of 38.4 hours and an increase in transport costs of \$10-\$15 million.

Some locks are not only old but outmoded. Traffic at 24 critical locks encounters delays of up to 12 hours, costing the industry more than \$155 million annually. Barge users deserve a reliable water transportation system. What's needed is sufficient Federal investment in new infrastructure—and in the timely maintenance of existing facilities—to assure a first-class navigation system, one able to keep pace with the transportation demands of a growing U.S. economy.

After a hiatus of almost a decade, the authorization of navigation projects was resumed following enactment of major cost-sharing reforms in the Water Resources Development Act of 1986. That act specified that waterway users would pay a fuel tax of 20 cents per gallon, with the proceeds used to pay one-half of the cost of lock-and-dam replacements and major rehabilitation. Sadly, the Inland Waterways Trust Fund has run up a large surplus, now totaling about \$400 million, while navigation construction and rehabilitation waits and the benefits of new projects, delayed by funding shortfalls, are foregone. One of the major waterway modernization projects

that I hope can be included in the next WRDA is the authorization of long-delayed and much needed improvements on the congested and outmoded Upper Mississippi and Illinois Waterways system. *We support immediate authorization for construction of at least seven new 1200-foot locks at L&D 20, 21, 22, 24 and 25 on the Upper Mississippi and at LaGrange and Peoria Locks on the Illinois Waterway.*

The Upper Mississippi is a prime example of the challenges the U.S. Army Corps of Engineers faces, now and in the future, in managing our inland system. The lock system, built for steamboats in the 1930's, is obsolete and inefficient, and has lost 10 percent of its capacity each year over the last 10 years due to unplanned closures. Where once we had a vibrant "3d Coast" for the Midwest with the attendant reduction of transportation costs, we now have a gradual loss of global competitive advantage in grain exports, jobs and quality of life, due to inaction.

Several independent studies conducted by the National Corn Growers Association and other agricultural groups confirm grave consequences if the Upper Mississippi needs are not addressed in a timely fashion. By 2020, without at least seven new locks in place, the U.S. will lose 30,000 jobs and almost 80 million bushels of grain and soybean exports. This will reduce farmer income by over \$500 million per year, widen the trade deficit and increase the Federal budget deficit by \$1.5 billion per year.

By finally moving aggressively on construction authorization for at least these seven locks, where congestion currently exists, you will create over 3-5,000 new construction jobs per year and yield transportation efficiencies that will reduce freight movement costs, which in turn, will help support the existing jobs base in the region. At the same time, congestion on roads and railroads and within our communities will be reduced. There will also be the added value of keeping income in rural communities and fostering a sense of hope for hundreds of thousands of Americans.

III. *In the next WRDA, Congress needs to address how the water resources program is being implemented.* Since 1824, the Army Corps of Engineers has been charged with administering our civil works program, which started with navigation but later embraced flood protection, environmental restoration and other missions. Worldwide, the Corps of Engineers is viewed as a premier engineering organization, but its ranks have expanded in recent years to include many disciplines besides engineers, including ecologists, biologists, chemists, geographers, economists, etc. This is a Federal agency which has a tough job, unlike that of any other agency with which I am familiar, in balancing competing national objectives, particularly economic and environmental goals. I happen to believe that we can have both a robust economy and a healthy environment.

When WRDA was under consideration last year in the other body, the legislation was amended to include several policy reforms. The most sweeping provision calls for peer reviews of project studies, a procedure that was described as a means of improving projects, not derailing them. I agree. Project reviews should look only at scientific and technical matters without getting into policy issues. Outside counsel is bound to be helpful to the Corps and, ultimately, the water resources program.

The Army Corps of Engineers has been criticized in the past for various reasons. One appears to be that some mistakenly assume that the "true value" of waterway projects is reflected in the benefit-cost ratios developed for the economic projects of the Corps. In actuality, those ratios only reflect a range of national economic benefits of a project. To correct that misperception, it would be helpful if, in the future, the Corps were directed to include an additional analysis of the full economic and environmental impacts of a project on a national, regional and local basis. To insure that there is no question that the entire Corps program is valuable to the Nation, *it would also be beneficial for all Corps projects to undergo a benefit-cost analysis.* Of course, any policy changes should serve to enhance the formulation of civil works projects in their order of importance or national priority and to restore the credibility and polish the public image of the Army Corps of Engineers.

IV. *Public policy should favor the waterways mode.* Because of the buoyancy of water, barges require less energy per ton of cargo and thus consume less fuel and emit fewer pollutants into the air. Towboats are quiet and out of sight most of the time, skirting cities and towns. There are no loud horns, squealing tires or annoying vibrations. Most importantly, water transportation takes traffic off overland modes, relieving congestion on major corridors. A single, 15-barge tow hauls as much commerce as 870 trucks, which would stretch 11½ miles bumper to bumper.

Both railroads and highways are already crowded, and experts are predicting that highway traffic will grow from 11 billion tons to 19 billion tons a year by 2020 while rail traffic is expected to increase from 2 billion tons to 3.7 billion tons in the same period. But except for a few congested locks, waterways have a lot of capacity. This is true in our country—and in Europe as well. European governments, in fact, have instituted policies to shift cargo from roads to water, alleviating congestion and in

the process making roads safer, too. Perhaps surprising for many, the Europeans view this traffic shift as beneficial not only for social and safety reasons but also for the environment, which is highly valued there as here. We would support a policy wherein the Corps of Engineers is directed to expand their benefit-cost analyses by including those social, environmental and safety factors now utilized by the Europeans.

V. *U.S. policy should also encourage innovations that increase the usefulness of water transportation.* For instance, container-on-barge service is still in its infancy on our waterways. Moving containers by barge has been practiced for the last decade on the Columbia-Snake Waterway, connecting Idaho and eastern Washington with the Port of Portland. And ocean-going deck barges have been used for years to shuttle containers between coastal ports. Just recently, a container-on-barge service between New Orleans and Baton Rouge was launched, and plans were recently announced for such a service between Memphis and Louisville. But in Europe, barges carrying containers are quite common and their use is officially encouraged to take containers off busy highways, helping to relieve traffic congestion and hold down road accidents, noise and pollution.

Another water transport system, commonplace in Europe, is the river-ocean vessel capable of navigating rivers and waterways as well as the open seas. Short-sea shipping, as it is some-times called, adds another dimension to water transportation by eliminating the need for cargo transfers at coastal terminals. One such vessel operates in the United States, carrying rocket motors from a Boeing plant in north Alabama, down the Tennessee-Tombigbee Waterway to the Gulf of Mexico and finally to destinations in Florida or California. Same-vessel service between Central America and Mississippi River points has been tried a couple of times in the past, but the trials failed to meet expectations.

Nevertheless, short-sea shipping has been rather successful in Europe and elsewhere, and I believe it has a future here, too. We must not pass up any opportunity to improve the productivity of our transportation system and, at the same time, enrich our national economy and help our environment. Policymakers should take another look at coastal shipping opportunities, too, such as ships moving containers or even trucks themselves in a roll-on roll-off service paralleling busy Interstate 95 on the Atlantic Coast and Interstate 10 along the Gulf Coast. We encourage the Committee to do everything possible to promote opportunities for expansion of services onto our waterways so that our intermodal transportation system will be enhanced.

IV. *Conflicting Federal policies threaten navigation.* Last, Mr. Chairman, the U.S. Army Corps of Engineers is tasked with implementing and managing waterway projects according to the project purposes outlined by Congress as well as adhering to the various Federal laws that impact the waterways. But, more and more, our transportation network is being jeopardized by interpretations of what Federal policies and purposes take precedence. In particular, the application of the Endangered Species Act has had grave consequences. It has recently come to our attention that there have been questions over whether some of the species the U.S. Fish and Wildlife Service presumes to protect are really "distinct" from other species in the same locations. In an effort to clarify matters and ensure that "sound science" is maintained, we would suggest that the Army Corps of Engineers be directed to request a judgment from the National Academy of Sciences on the degree of genetic variation required to define a "distinct" species.

Thank you, Mr. Chairman and members of the Committee, for your courtesy in hearing my statement. We appreciate your interest in America's navigation infrastructure and your efforts over the years to strengthen the inland waterways system. I urge the Committee to consider the public value of waterway transportation and its vital importance to the American economy with relatively few environmental impacts. With the leadership of the U.S. Army Corps of Engineers and continued lock-and-dam improvements, the inland waterways system will provide significant benefits to our Nation, our coastal and interior regions, and our people.

RESPONSES BY HON. JOHN T. MYERS TO ADDITIONAL QUESTIONS
FROM SENATOR JEFFORDS

Question 1. You suggest that in the future, the Corps should undertake a full economic and environmental impact analysis for all projects. What does Congress need to do to make this happen, and, if we were to provide this direction, can you describe any impediments and solutions to executing this change?

Response. The Flood Control Act of 1936 directed that navigation and flood control projects be subject to benefit cost analyses. Prior to 1983, the guidance for those

analyses was contained in the Principles and Standards, which provided for recognizing benefits in four accounts: National Economic Development benefits, Regional Economic benefits, Social Well-Being benefits and Environmental Quality. It was reasonable to assume that the Administration and Congress could then make funding decisions based upon the full range of economic and environmental benefits of a project.

During the Reagan years, the Principles and Standards were replaced by the Principles and Guidelines which mandated that only National Economic Development benefits be used in cost-benefit analyses, often short-changing projects that provide multiple benefits. Especially during times of limited funding, it is vital that Congress be able to compare “apples to apples,” and have a complete picture of the broad spectrum of direct and indirect project benefits in order to ascertain whether a project provides a meaningful return on investment.

It is interesting to note that the European Parliament has implemented a strategy that gives preference to waterway funding. Their rationale takes into account environmental benefits of waterway transportation such as reduced air pollution, congestion mitigation, reduced noise pollution and accidents prevented—none of which are included in our current cost-benefit analyses.

Congress can address this lack in two basic ways. The first is to amend the Water Resources Development Act of 1986 to provide that all Corps projects be subject to the benefit cost criteria contained in the Flood Control Act of 1936. Then, Congress should direct the Corps to include such benefits as regional economic development, social well-being and environmental quality in their cost-benefit analyses. Should Congress decide not to extend the cost-benefit guidelines, these benefits can still be captured through language directing the Corps to include a supplemental analysis outlining the broad range of direct and indirect benefits of a project.

There are few if any impediments to making this policy change. The Corps of Engineers currently has the ability to calculate a broad range of benefits not normally included in NED analysis. We estimate that cost-benefit analyses for environmental restoration projects could be available within the next year as work is proceeding on this effort.

Question 2. You have stated that there are millions of dollars in surplus in the Inland Waterways and Harbor Maintenance Trust Funds, yet rehabilitation and operation and maintenance needs are going unmet. What do you think the reason is for this? What should be done to reduce these surpluses?

Response. The Inland Waterways Trust Fund is used to pay one-half of the cost of lock-and-dam replacements and other shallow-draft navigation-related construction and also the major rehabilitation of inland navigation facilities. All are located on some 12,000 miles of 27 specified, shallow-draft waterways subject to the inland waterways fuel tax, now 20 cents per gallon. Proceeds from this tax finance the trust fund. At present, the Inland Waterways Trust Fund has a surplus of approximately \$400 million.

The Harbor Maintenance Trust Fund pays 100 percent of the cost of dredging to maintain authorized depths of deep-draft harbor access channels on the Atlantic, Gulf and Pacific Coasts as well as the Great Lakes. The trust fund is also utilized to pay the cost of shallow-draft channel maintenance on non-fuel-taxed waterways. The trust fund is financed by an ad valorem tax of 0.125 percent of cargo value and it is levied on imports and domestic cargo at deep-draft ports. The trust fund has a surplus of about \$1.8 billion, which OMB projects to grow to \$2.6 billion by the end of fiscal year 2005.

Both trust funds were authorized in the Water Resources Development Act of 1986 (Public Law 99-662), which provided that the moneys in each of the trust funds “shall be available, as provided by appropriations Acts,” for the purposes for which the funds were established. They were also intended as a supplement to amounts appropriated by Congress so that direly needed construction, major rehabilitation and operation and maintenance could go forward in a timely manner. At the time, it was anticipated that the Inland Waterways Trust Fund would be broke within 10 years because of so many pending navigation projects. But that never happened, because the Administration did not request and Congress did not approve spending at optimum construction levels. Funding was stretched out for various reasons. As a result, the surplus has slowly grown over the years.

The Harbor Maintenance Trust Fund is a different story. When enacted in 1986, it consisted of an ad valorem tax of 0.40 percent of cargo value, with the proceeds intended to pay no more than 40 percent of maintenance dredging costs. But in 1991, the tax was tripled, to 0.125 percent of cargo value. As a result, the harbor maintenance tax has generated far more money each year than channel maintenance has required, and the surplus is grown by leaps and bounds.

What should be done to reduce these surpluses? In the case of the Inland Waterways Trust Fund, the obvious answer is for the Administration to request and the Congress to appropriate more money for inland navigation projects—in the range of \$150 million annually rather than the current \$100 to \$115 million. There also needs to be recognition that these funds are a matching user contribution—intended to hasten the construction schedules, not be substituted for regularly appropriated funds. Increased spending for these projects would save money on construction contracts and also allow the Nation to realize the benefits of these projects sooner. In the case of the Harbor Maintenance Trust Fund, consideration should be given to reducing the current ad valorem tax to a level that is more in line with actual maintenance needs.

STATEMENT OF DERRICK CRANDALL, PRESIDENT, AMERICAN RECREATION COALITION

Mr. Chairman and Distinguished Members, the American Recreation Coalition (ARC) appreciates the opportunity to appear before this body today to discuss an extraordinarily important issue: the future of recreation opportunities on the lands and waters managed by the U.S. Army Corps of Engineers (USACOE).

I am Derrick Crandall and I am appearing on behalf of the members of the American Recreation Coalition (ARC)—more than 100 national organizations, representing virtually every segment of the nation's \$400 billion outdoor recreation industry, and tens of millions of outdoor recreation enthusiasts. A listing of our members is attached to this testimony. I am joined today by Curt Cornelissen, a member of ARC's Board of Directors and chairman of ARC's Task Force on USACOE Recreation Program Opportunities. Curt is the Director of Hospitality and Leisure Consulting at PricewaterhouseCoopers.

Our organization has played an active role in Federal recreation policy since its creation in 1979. We were centrally involved in the creation and operations of the President's Commission on Americans Outdoors in the mid-1980's and the National Recreation Lakes Study Commission, which submitted its report in 1999 to the Congress and the President. Both spoke directly to the topic before this body today. We also were actively involved in the creation of the National Recreation Fee Demonstration Program and have enjoyed opportunities to work closely with this committee on such diverse programs as the National Scenic Byways Program, the Recreational Trails Program, the Wallop-Breaux program aiding fishing and boating, and programs to provide access to and safe transit across our public lands. We thank the Chairman and members of this body for the continuing interest shown in these important issues.

Outdoor recreation is a vital and positive force in our Nation today. Nine in ten Americans participate in outdoor recreation today, and a major catalyst for this involvement is the marvelous shared legacy of our Great Outdoors—one in three acres of the surface of the Nation managed by Federal agencies and hosting well in excess of a billion recreation visits annually. ARC monitors participation in outdoor recreation closely through annual national surveys. A summary sheet on participation is attached.

The benefits accruing from recreation participation are significant, and the appreciation for these benefits is growing. The economic significance of outdoor recreation is obvious in communities across the Nation, and especially those communities proximate to federally managed lands and waters. From boat dealers to campground operators, from RV manufacturers to ski rental shops, from retailers selling outdoors goods to guides and outfitters, tens of thousands of businesses and millions of Americans are supported by \$400 billion in annual expenditures on recreation by American families. And increasingly, America's recreational opportunities are a key factor in luring international visitors to enjoy the world's best systems of parks and forests, refuges and other public sites.

But the public recognizes that recreation contributes far more significantly to our Nation in ways beyond jobs. Recreation is understood as a valuable means to encourage the physical activity we need to maintain our health. With two in three Americans failing to get the minimum level of physical activity recommended by the Surgeon General—just 30 minutes daily of moderate movement like walking—and obesity now responsible for medical costs greater than those linked to tobacco, opportunities to combine exercise with fun are an obvious priority. And in fact, the President has now issued an Executive Order directing Federal land managing agencies including the USACOE to assist in elevating the level of physical activity in our Nation. Studies are now imminent which will document that increasing recreation participation can be among the most cost effective strategies for reducing public health costs.

And the benefits arising from recreation don't stop there. Recreation can be a very effective means for increasing parent-child communications as well as a tool to deter violent crime and substance abuse. Outdoor settings and recreational activities have proven valuable as alternative educational programs, especially for disruptive youth and those with learning styles poorly suited to traditional classrooms.

RECREATION AND THE LANDS AND WATERS MANAGED BY USACOE

The President's Commission on Americans Outdoors helped the Nation recognize several important trends. First, it noted the dramatic increase in recreation demand and predicted continuing, high growth in participation for several decades. Second, it noted the lure of water for recreational activities—including activities like camping and trail sports that are land-based. The Commission estimated that 75 percent of all recreation in America takes place within a quarter mile of the land/water boundaries of our oceans, lakes and rivers. The Commission also emphasized the need for support facilities for recreation experiences—from trails to marinas, campgrounds to ski areas and more. The Commission called upon Congress and Federal agencies to assemble funding needed to build and maintain these facilities under innovative partnerships. The Commission also addressed paying for recreation services and facilities, urging Federal policy to move toward a much greater reliance upon fees paid by those who visit Federal lands and benefit from Federal investments and spending. And it applauded the concept of special, earmarked funding sources such as the Wallop-Breaux fund, which imposes Federal taxes on fishing equipment and then returns the collected taxes as user fees to programs aiding boating and fishing.

The Commission's recommendations have produced important policy changes, and in fact stimulated the development of the National Recreation Fee Demonstration Program and new authorities for the National Park Service, the Forest Service, the Bureau of Land Management and the Fish and Wildlife Service which now provide some \$200 million annually in supplemental funding for these agencies.

Ten years later, the National Recreation Lakes Study Commission added important information to the public policy debate regarding USACOE's recreation program—and a new sense of urgency. The Commission's report, "Reservoirs of Opportunity," was submitted to the President and the Congress in June 1999. It offered the following conclusions:

- Federal lake recreation is a significant national resource and a public benefit of Federal water projects, making an important contribution to local, state and national economies. These lakes host 900 million visits annually, generating \$44 billion in recreation-related spending;
- Recreation at Federal lakes has not been treated as a priority, or often even as an equal with other reservoir uses, despite its status as an authorized purpose;
- Recreation management at Federal lakes lacks policy direction and leadership as well as sufficient interagency and intergovernmental planning and coordination;
- Recreation facilities at most Federal lakes are inadequately maintained, with a \$1 billion maintenance backlog, and are insufficient for today's levels of public use;
- Current recreation user fee practices are not particularly successful as a revenue generator; the recreation fee demonstration program offers a model for more successful revenue generation;
- Better management will be necessary to meet current and future recreation demand, with or without increased appropriations;
- Partnerships with state and local governments and with private businesses need to be expanded and improved;
- Concessioner policies at Federal lakes are inconsistent and a disservice to the public, which benefits when concessioners are able to operate under conditions that allow them to succeed;
- Federal agency policies limiting cost sharing with state and local government partners are unwise;
- Reservoir water management, including draw-downs and flow levels, can and should serve recreation and environmental purposes as well;
- Clean water is critical to lake recreation as well as lake health; and
- The concept of a national recreation lakes system has merit and should be tested through a demonstration program.

The Commission report also offered five major recommendations:

- Recreation should be made a higher priority at Federal lakes;
- Federal recreation lake leadership should be energized and focused through the establishment of a Federal Lakes Recreation Leadership Council;
- Federal lake recreation should be advanced through innovation and revised policies;

- An environment for Federal lake recreation management success should be created; and
 - The gap between recreation needs and services should be identified and closed.
- The Commission confirmed that the USACOE is far and away the greatest host of recreational visitors to public waters. The Commission's work documented that recreation facilities at Corps sites were largely at or beyond their original design lives and that there were virtually no planned capital investments in recreational facilities, despite a pattern of growing demand.

MEETING THE CHALLENGE

The U.S. Army Corps of Engineers (USACOE) is the leading Federal provider of recreation opportunities in America today. Recreational activities on the lands and waters it manages are varied and diverse, from fishing and camping to sailing and picnicking, from hiking and biking to waterskiing and windsurfing, canoeing to trailriding with horses and ATVs, swimming to diving—and dozens of other activities. Corps projects include highly developed sites as well as remote, pristine zones. What is consistent is the lure of the land-water intersection and its magnetic nature for leisure times.

Yet all is not well at too many USACOE recreation sites. In some instances, recreation demand is relatively recent, posing challenges to a mix of management missions and coming after most investments at the projects had been completed. In other instances, recreation facilities show the double impacts of normal aging and inadequate maintenance budgets. In some cases, the USACOE faces the threat of “turn-backs”—recreation facilities constructed in partnership with state and local governments that need substantial new capital spending, and the local partners flatly refuse to assume this burden alone, or perhaps at all. Changing recreation equipment demands changes in campgrounds, marinas and trails—in some instances changes that could generate additional recreation fees, but investments are a prerequisite.

It is time for action to enable the Corps recreation program to address national needs for recreation.

Some will fear that steps to meet recreation needs at sites managed by the U.S. Army Corps of Engineers will result in significant new costs to the Federal budget. Although ARC will argue strongly that recreation program expenditures are legitimate and beneficial, we believe that improved recreation opportunities can be achieved without large increases in general funding for USACOE recreation facilities and programs.

What is needed are new strategies and new tools supplementing, but not replacing, proven and traditional operating and investment practices. In some instances, these new tools are adaptations of tools already in use by other Federal natural resource agencies with recreation missions. In other instances, the tools are employed elsewhere within the Department of Defense.

Perfecting the tools and learning to use them wisely will require senior USACOE involvement, recruitment of top outside assistance and empowerment of a small number of carefully selected USACOE project staffers. Then and only then can the skills and tools be transferred for more universal application at USACOE projects nationwide.

We ask this body to provide the USACOE recreation program with new authorities and new directions. We recommend the following actions:

(1) All USACOE sites should be given the authority to charge and retain recreation fees under an authority resembling that provided to four other Federal recreation-providing agencies under the National Recreation Fee Demonstration Program. We applaud the Administration's call for this authority in the President's fiscal year 2005 budget proposal, although we disagree strongly with any provision that would limit the retention of fees to those exceeding the high point of recreation fee collections of \$37 million annually. Such a threshold would have significant and adverse consequences. It would discourage alternative management strategies, including increased reliance on concessioners, at present fee sites—even if such alternatives would reduce overall USACOE operating costs. The threshold could also prove significant if forces such as storms, fires and other major events reduced fee collections at current collectionsites and thus prevented planned retention of fees at new sites—and thus risks antagonizing visitors paying the new fees in expectation of enhanced services and facilities.

The details of the Corps new fee program are complicated by current revenue-sharing provisions with state and local governments. The problems are not insoluble, however. One alternative is to allow retention by the Corps of 75 percent of all “new” fees unless local government agrees to provide appropriate and offsetting

services, including law enforcement and maintenance, in a project-specific agreement with the Corps.

Finally, and unlike under the fee demo program, the USACOE should retain at the project level 75 percent or more of the fees paid by recreation permittees and concessioners.

(2) In another national policy change, the Corps should be encouraged to manage recreation at its sites, not be a direct provider wherever possible. This would parallel the role of the Forest Service with ski areas and campgrounds as well as the role now played by hundreds of state parks operating on USACOE lands;

(3) The Corps should be given the authority to establish NAFI (Non-Appropriated Funding Instrumentalities) operations at all USACOE projects, paralleling the authority recently provided to the Department of Veterans Affairs;

(4) A USACOE Recreation Demonstration Program should be authorized. This project to improve the USACOE recreation program should be based on a small number of carefully selected sites—no more than eight for fiscal year 2005 and 2006. Efforts at these sites should be assisted and guided by several principles and authorities, including:

- (1) continuation of base-level recreation program funding at these sites;
- (2) continuation of all current missions for the involved projects;
- (3) demonstrated local support and interest;
- (4) maintenance of resource quality, and especially water quality;
- (5) retention of all new revenues generated through fees, permits, concessions agreements and other mechanisms linked to recreation activities and facilities;
- (6) coordinated development of new recreation facilities and opportunities;
- (7) full use of available discretionary funding for wildlife, fisheries, boating, trails, roads and more available through state and local governments; and
- (8) substitution of non-Federal funding for facility construction and maintenance where practical.

To aid in the pilot effort at the selected sites, the USACOE needs specific legislative authorities exclusive to these sites:

(1) the ability to issue permits and concessions which justify private investments in campgrounds, marinas, lodges and other public recreationsites. This authority should be parallel to that now available to the Forest Service and applying to ski area permits, utilizing terms of up to 40 years. Presently, some 60 percent of the nation's skiing occurs on national forests at privately developed ski areas;

(2) the ability to competitively award long-term leases for development of publicly available recreation facilities, an authority modeled after the Southern Nevada Public Land Management Act. Proceeds from any such sales would be restricted to use at the involved project and for specific purposes, including construction and operation of other public recreationsites, utilities and environmental stewardship;

(3) the authority to enter into LIP (Lake Improvement District) agreements with local governments under which real estate surcharges would be levied on private lands and privately owned investments on USACOE lands enhanced in value by recreation improvements linked to lake access, and where the LIP receipts would be earmarked for public recreation enhancements, utilities and environmental stewardship; and

(4) an expedited permit review and decisionmaking process.

Selection of the pilot effort sites should be made by a Lakes Initiative Advisory Board comprised of five persons. The panel could be chaired by the Assistant Secretary of the Army for Civil Works and include a Member of Congress with demonstrated interest in the USACOE program, two USACOE executives and a knowledgeable recreation industry executive. The panel should also provide oversight of the experimental efforts and, by February 2006, should submit a report to the President and the Congress recommending any new authorities and directions appropriate to assure the USACOE recreation program contributes to national, regional and local needs. To enable this panel to operate and retain needed expertise, a total of \$350,000 per annum should be provided.

THE POWER OF PARTNERSHIPS

I close my testimony with an example of how the public can be well served through creative partnerships. The example comes from the lakeshore in Chicago.

By the mid-1990's, Chicago's lakeshore had become a financial challenge to the city. Despite high demand for boat slip rentals and the lure of the lakeshore for other activities, the lakeshore operations had become a significant economic burden to the city—and a source of complaints from boat owners and others. Poor business practices allowed slips to go unrented despite long waiting lists and poor maintenance resulted in city payments for. The city turned over lakeshore responsibilities

to an experienced marina operating firm, and an immediate turn-around occurred. Within 2 years, the firm presented the city with a proposal to redevelop the entire lakeshore, including 8,000 rental slips, restaurants, the lakeshore walk and more. The improvements would be made with revenues from city-issued bonds which would be repaid by the increased revenues from lakeshore operations. The operating firm acted as general contractor for the project, overseeing \$52 million in investments on time and under budget. As a result, lakeshore recreation receipts have surged by more than \$11 million annually—which allows full funding of operations, repayment of the bonds and \$6 million annually in subsidies for city recreational programs ranging from ice skating rinks to a sailing program for handicapped youth.

Thank you for your interest and actions to produce a bright future for recreation on the lands and waters managed by USACOE.

AMERICAN RECREATION COALITION MEMBERS

SUSTAINING

America Outdoors	National Forest Recreation Association
American Association for Nude Recreation	National Marine Manufacturers Association
American Council of Snowmobile Associations	National Park Hospitality Association
Dometic Sales Corporation	Pennsylvania Recreation Vehicle & Camping Association
Family Campers and RVers	PriceWaterhouseCoopers
Family Motor Coach Association	Professional Paddlesports Association
Good Sam Club	Recreation Vehicle Dealers Association
International Snowmobile Manufacturers Association	Recreation Vehicle Industry Association
Jayco, Inc.	ReserveAmerica
Kampgrounds of America	Sporting Goods Manufacturers Association
National Association of RV Parks and Campgrounds	The Coleman Company, Inc.
	The Walt Disney Company

GENERAL

Academy of Aeronautics	Experimental Aircraft Association
American Association for Leisure and Recreation	Florida International University
American Association for Nude Recreation-Western Region	Florida RV Trade Association
American Bus Association	International Association for Amusement Parks and Attractions
American Forests	International Association of Snowmobile Administrators
American Horse Council	International Family Recreation Association
American Hotel and Lodging Association	International Jet Sports Boating Association
American Motorcyclist Association	International Kart Foundation
American Power Boat Association	Kampground Owners Association
American Resort and Residential Development Association	Kawasaki Motors Corp., U.S.A.
American Sportfishing Association	Kilgore Ranch Company
American Suzuki Motor Corporation	Leisure Systems, Inc.
American Trails	Marina Operators Association of America
Bicycle Manufacturers Association of America	Marine Retailers Association of America
Boating Trades Association of Texas	Maryland Association of Campgrounds
BoatU.S.	Michigan Association of Recreational Vehicles and Campgrounds
Bombardier Recreational Products	Michigan Boating Industries Association
Carefree of Colorado	Montana Department of Fish, Wildlife and Parks
Champion Fleet Owners Association	Motorcycle Industry Council
Clean Beaches Council	Mountain Outdoor Recreation Alliance of Western North Carolina
Coachman Industries, Inc.	National Alliance of Gateway Communities
Coast to Coast	National Association of Intercollegiate Athletics
Colorado Agency for Campgrounds, Cabins & Lodges	
Cross Country Ski Areas Association	
Employee Services Management Association	

National Association of Trailer Manufacturers	SAMPO, Inc.
National Boating Federation	Seaway Trail, Inc.
National Club Association	Southern California Marine Association
National Hot Rod Association	Special Recreation for disABLED International
National Off-Road Bicycle Association	Specialty Equipment Market Association
National Ski Areas Association	Specialty Vehicle Institute of America
National Sporting Goods Association	States Organization for Boating Access
National Tour Association	Texas Recreational Vehicle Association
Northern California Marine Association	Thor Industries, Inc.
Outdoor Industry Association	United Four Wheel Drive Associations
Personal Watercraft Industry Association	United Mobile Sportfishermen, Inc.
Recreation Vehicle Indiana Council	United Motorcoach Association
Recreational Park Trailer Industry Association	USA Water Ski
Recreational Vehicle Aftermarket Association	Wally Byam Caravan Club International
Resort and Commercial Recreation Association	Warren Jones
	Western States Tourism Policy Council
	Yamaha Motor Corporation, USA

Outdoor Recreation Activities Participated In Past Year: Trend Data

[Percentage of who have participated in during past year; ranked by 2003 data]

	1994	1995	1996	1997	1998	1999	2000	2001	2003
Walking for fitness/recreation	NA	45	39	42	47	42	57	49	46
Driving for pleasure	40	36	33	34	39	35	41	36	43
Swimming	35	31	28	31	33	40	39	40	41
Picnicking	33	29	24	26	30	32	36	36	38
Fishing	26	24	22	20	22	28	26	28	28
Bicycling	21	20	16	19	19	22	23	23	22
Running/jogging	19	16	13	12	16	16	18	21	19
Campground camping	16	16	12	12	15	21	17	18	18
Hiking	18	18	12	15	17	15	19	22	18
Outdoor photography	15	15	10	13	15	12	17	17	17
Bird watching	14	11	8	11	10	11	16	18	16
Wildlife viewing	18	15	10	14	16	15	16	20	16
Visiting cultural sites	NA	NA	12	14	18	16	16	17	15
Golf	11	12	11	11	12	12	13	12	13
Motor boating	10	9	5	8	9	11	9	12	10
Back packing	13	12	8	7	10	10	9	10	9
Canoeing/kayaking	6	5	4	5	5	7	5	7	8
Hunting	8	7	7	5	7	8	8	8	8
RV camping	8	8	6	7	7	9	9	9	8
Wilderness camping	NA	NA	NA	NA	NA	NA	8	8	7
Horseback riding	6	5	5	4	4	6	5	6	6
Motorcycling	7	5	6	4	4	6	5	6	6
Off road vehicle driving	5	5	5	5	7	7	7	7	6
Target shooting	8	6	5	4	5	7	6	6	6
Tennis	9	9	7	8	5	6	8	8	6
Mountain biking	5	5	4	4	4	6	5	5	5
Personal water craft (e.g. jet skis)	NA	NA	NA	3	5	5	5	6	5
Downhill skiing	6	6	5	5	5	4	4	5	4
Water-skiing	6	6	3	4	4	6	4	6	4
In-line skating	NA	4	4	5	6	5	5	6	3
Rock climbing	4	4	3	3	4	3	4	4	3
Rowing	3	2	1	2	1	1	2	2	3
Sailing	4	3	3	3	2	3	2	4	3
Snorkeling/Scuba diving	4	3	3	3	3	4	3	4	3
Cross-country skiing	2	3	2	2	2	1	2	2	2
Snowboarding	NA	NA	NA	NA	1	3	2	3	2
Snowmobiling	2	3	2	1	2	2	2	2	2

(NA) denotes not asked

RESPONSES BY DERRICK CRANDALL TO ADDITIONAL QUESTIONS
FROM SENATOR INHOFE

Question 1. Mr. Crandall, in your testimony you make it clear that there is greater demand for recreation than what the Corps is currently providing. Has your organization, or anyone else tried to quantify that unmet demand.

Response. The American Recreation Coalition does track recreation participation and demand through annual surveys of the public. Attached is a chart showing participation for 37 key activities which show that participation rates have trended upward for activities most common at Corps recreation sites at the same time that the total US population has grown by approximately 1.5 percent annually—suggesting an increase of approximately 20 percent in a decade if the percentage of the public participating in an activity remains constant. We are also including a chart showing recreational boat registrations over the past twenty years. This chart clearly demonstrates a growth in demand for a key water-based activity. At the same time, growth in Corps-managed recreation sites has been minimal.

We feel certain that these statistics actually understate demand for several reasons. First, population has been strong in many of the geographic regions of the Nation where the Corps' recreation role is strongest, including the southeast. Second, surveys of boaters by various entities have shown concerns about increases in waiting time at launch ramps. And finally, there has been a clear and significant growth in demand for expanded services not contemplated 30 years ago. Recreation patterns have changed, away from weekends-and-two-weeks-in-the-summer to more frequent, multi-day recreation periods at destinations offering a variety of activities, accommodations, shopping and dining. Lake Powell, in full operation for just over thirty years, has emerged as the Federal recreation site with the greatest number of overnight stays—despite its distance from population centers.

Question 2. One of your recommendations is to give the Corps the authority to establish Non-Appropriated Funding Instrumentalities, similar to the authority provided to the Department of Veterans Affairs; could you explain what that is and how that would benefit recreation?

Response. NAFIs facilitate the collections and retention of receipts at local sites to support a level of services and facilities sought by the public. Widely used on military bases for decades in connection with recreation sites, food services and more, it allows effective response to changes in customer desires and provides increased revenues to pay for meeting increased demand. The Department of Veterans Affairs was recently given NAFI authority for its hospitals and covering shops, food services, pharmacies, medical supply sales and rentals and more. Under a NAFI, an agency is not forced to wait through an appropriations cycle or longer to respond to marketplace changes.

For the Corps, NAFIs could allow retention of fees at Corps-operated recreation facilities, such as campground, and thus extend campground operations into shoulder seasons if demand warranted or add parking at popular boat launches without reliance on appropriations. In addition, a NAFI could permit a Corps recreation site to allow a private operator to invest in a recreation facility and pay a fixed lease payment or a payment based upon income to the site—with the payments retained by the Corps to pay for its other recreation operations at the project.

Question 3. In your opinion, what are some of the specific items that discourage the maximization of recreation benefits at Corps sites?

Response. We believe the lack of any economic incentives to the agency—including the inability to retain fees or lease payments—is the primary, but not sole, discouragement. Another discouragement is the decentralized “voice” of recreation/tourism interests, in contrast to other key Corps constituencies including navigation and hydropower interests. A third discouragement is the inadequate and inconsistent assessment of the benefits of recreation in Corps operations decisionmaking. And finally, we have seen that both internally and within the Federal budget process, there has been resistance to elevating recreation to an equal status with other Corps primary missions, including flood control, navigation and environmental protection.

Question 4. Because of these distorting incentives within the Corps, do you think that the type of recreation provided at Corps facilities is also distorted?

Response. The inability of the Corps to retain recreation program receipts, including fees and concessions payments) has prompted the Corps to rely heavily upon state and local governments as partners, rather than the private sector. It has also prompted a recreation program that centered on geographical areas where political support, chiefly in the Congressional appropriations process, allowed expansion and

full operations. In general, Corps recreation operations have favored high quantity over high quality sites.

Question 5. Do you think that the Corps, if given the proper incentives, could significantly expand recreational opportunities at Corps facilities?

Response. Absolutely. Most Corps lakes are underutilized, either because of limited access and/or inadequate support facilities ranging from modern marinas to well-designed and well-maintained boat launch facilities, from campgrounds to resorts. Because the Corps owns and manages most of the lakeshore at its projects, private sector efforts to meet public demand cannot be done except in partnership with the Corps. As referenced in my testimony before the Committee, such partnerships can be extraordinarily successful, as in Chicago. Such partnerships can eliminate the need for major Federal capital investments and can also generate revenues to underwrite the USACE's recreation program operating expenses.

STATEMENT OF STEVE LEVY, COUNTY EXECUTIVE, SUFFOLK COUNTY, HAUPPAUGE, NY

Chairman Bond and Senator Clinton, thank you for the opportunity to appear before you and other distinguished members of this committee to discuss an issue of vital importance to my county and to our state. My name is Steve Levy and I am the County Executive of Suffolk County, New York.

I am here today in the hope that this committee will not only reject the Administration's proposed policy initiatives, but will restore Federal funding and put forward legislative language that will encourage the regional management of America's coastal resources and assure that the Federal Government lives up to its statutory obligations.

Suffolk has a population of about 1.4 million residents and covers the eastern half of Long Island, which extends eastward 120 miles from New York City. We are a coastal county with about 1,000 miles of coastline.

Early last month, in my first report on the State of the County, I said that our coast is both our defining natural resource and a critically important economic asset. Our beaches must be managed intelligently. And, we can't do it alone.

Our beaches are world famous and have been consistently ranked among the best in the Nation. Our beautiful south shore bays contain valuable habitats that support commercial and recreational fisheries and other related activities. However, this complex array of barrier islands, bays, wetlands, mainland coast and associated floodplains suffer the ravages of storm winds, waves, and tides that cause shoreline erosion and flooding hazards. It must be protected and enhanced, not only for its natural value and the enjoyment of future generations, but because it is an essential component of Long Island's tourism/recreation economy, which had an estimated value of \$4.2 billion in 2003.

According to a May 2003 report prepared by the Suffolk County Legislature Budget Review Office, the value of spending associated with Suffolk County's Atlantic Ocean beaches generated regional economic benefits valued at \$173.4 million in 2003. It was estimated that over 11 million people visit these beaches each year with boating also being an important activity in the south shore bays and ocean. According to the New York Sea Grant Institute, over 120,000 motorboats were registered in Nassau and Suffolk Counties in 2002.

Over my many years in public service, I have come to respect the dedicated men and women of the United States Army Corps of Engineers. These people have served courageously not only on Long Island, but in Manhattan after September 11th and in Iraq today, as America invests in rebuilding that country's infrastructure.

One of the Corps' functions, which has been authorized by Congress, is to develop a 50-year storm damage reduction plan for the coast along the south shore of Suffolk County from Fire Island inlet to Montauk Point. This, the Fire Island to Montauk Point Reformulation Study (FIMP), will result in a regional plan for reducing risks to life and property from flooding and erosion hazards along 83 miles of coastal property in ways that help to restore and maintain ecosystem processes.

The FIMP Study area encompasses 126 square miles in the 100-year storm floodplain. Nearly 160,000 people reside in the 73,000 homes located in the study area. This study, undertaken through The Water Resources Development Act, is especially critical to America's coastal infrastructure. In Suffolk County it means that we need Congress to fund the completion of the FIMP Study.

Started in 1980, FIMP represents an investment of over \$30 million to define the environmental and engineering steps that the communities of Long Island must take to restore and preserve our south shore coastal resources.

Unfortunately, the Administration wants to cut out all funding for this study just as we are approaching completion and readying to move toward the complex and costly implementation phase. The Federal Government should not walk away from its responsibilities in this area after two decades of work and the expenditure of millions of dollars. This program has been and must remain a Federal, State, and local partnership.

This project has proceeded under a partnership formed to share not only money, but also ideas and information. The Corps, working in partnership with the U.S. Department of the Interior (National Parks Service and U.S. Fish and Wildlife Service), National Marine Fisheries Service, New York State, local governments and stakeholder organizations, is aggressively evaluating the effectiveness of a full range of structural and non-structural alternatives for mitigating erosion and flooding-related problems thereby creating a model of environmentally sound sustainable coastal management.

From a coastal management perspective, this Study is among the most important regional environmental, economic, and public safety initiative. It involves the entire south shore of Suffolk County. The Corps has initiated a novel approach of incorporating environmental principles in this process, which is driving the analysis of future actions.

I am committed to fighting for the completion of the study and implementation of the vision it lays out for the coastal communities of Long Island. I am also equally committed to opposing any effort to undermine the sound partnership program to restore and preserve our nation's coastal resources that was set out in The Water Resources Development Act.

If we are to successfully attain coastal floodplain protection, shoreline stabilization, safe inlet navigation, and habitat restoration, we require enlightened intervention at a scale large enough to necessitate a continued Federal financial commitment to enable the Corps to complete the study. My partners in New York State and local governments do not have this coastal engineering expertise. The Corps alone is the national expert in this field.

Suffolk's beautiful, but fragile and vulnerable shoreline, which means so much to our local economy and our quality of life, must not be placed on the backburner of Federal priorities.

Suffolk County is also doing its part to assist in the implementation of non-structural measures to protect our south shore floodplains. It has been a leader in open space preservation over the past fifty years and has acquired over 50,000 acres of parkland and protected farmlands.

In the south shore study area alone, the County has acquired about 7,000 acres of property. These lands include important parcels located on the Atlantic Ocean shoreline along barrier islands and the mainland coast; on the shores of Great South, Moriches and Shinnecock Bays; and along numerous streams that flow into these bays. All are located within the south shore floodplain that is targeted by the Study. Some of these properties are used for active park and recreation purposes, but many have been managed to preserve wetlands and natural habitats and to protect water quality. In fact, Suffolk County is currently actively pursuing additional acquisitions in the study area that total about 500 acres of shoreline land.

Suffolk County's open space program has direct relevance to the FIMP Study, since it has precluded development in sensitive areas. As such, the County is playing a major role in the use of non-structural measures to reduce potential storm damages in floodplain areas.

I pledge to you today that the County will continue to work with the Corps of Engineers, its cooperating agencies, and stakeholders to assure successful completion of the FIMP Study and implementation of its recommendations. For this to occur, funding must be restored in the Federal Fiscal Year 2005 budget.

The Administration's failure to recommend funding for the Reformulation Study is directly related to the 180-degree policy about face announced in the President's Fiscal Year 2005 budget recommendations. Of course, the budget reflects the fiscal problems facing us today. But it seems these constraints have been used as an excuse to eliminate the Federal Government's role in restoring and preserving our beaches—an invaluable national environmental and economic asset.

Not only has the Administration announced that it will not support the periodic renourishment of beach projects, it has also refused to support ongoing environmental restoration projects (i.e., "Mud Creek Restoration Project;" which has become victim of the \$25 million nationwide limit that is available for restoration projects through the "Section 206 Continuing Authorities Program") and programs that mitigate the damage to our shorelines caused by Federal navigation projects. The ramifications associated with this policy would mean that our Reformulation Study goes by the boards while people try to turn the clock back 50 years. But a Federal-state

local partnership has helped maintain the Long Island coastline since the 1930's. I will do everything I can to work with you to provide necessary funding and to reject categorically the Administration's coastal policy initiatives.

In 1996, this Committee helped to pass The Shore Protection Act-Section 227 of The Water Resources Development Act. It makes a clear statement of congressional policy that the Corps will do studies of beach erosion and recommend specific projects to Congress for authorization as part of WRDA bills. It also gives preference to regional studies and projects, of which the Reformulation Study is a prime example. Working with local communities and all affected interests in those communities, the Corps has been developing a regional approach to viewing the Long Island coastline. Individual projects may well come out of this study, but each will be a part of a broader regional vision. Section 227 also gave preference to projects that responded to damage caused by various Federal actions along the coast. Where the Federal Government has, for example, funded the construction of a channel or the erection of structures, such as inlet jetties, that promote navigation, it is obligated under long-standing Federal law to mitigate for any damage those actions might cause when they interrupt the natural flow of sand to shorelines.

Once again to repeat as I began, I hope this Committee will not only reject the Administration's proposed policy initiatives, but will restore Federal funding and put forward legislative language that will encourage the regional management of America's coastal resources and assure that the Federal Government lives up to its statutory obligations.

Finally, let me say a word about periodic beach renourishment and ongoing environmental restoration and flood damage mitigation projects. I urge this Committee to use The Water Resources Development Act of 2004 to remind the Administration that those ongoing components are part of congressionally authorized projects. They are part and parcel of legally binding "Project Cooperation Agreements."

We at the county and local levels of government make our plans to raise the non-Federal share of studies and projects based on commitments made by the Federal Government. We understand that there may be lean Federal fiscal years, just as we may encounter fiscal difficulties that delay studies and projects. But we cannot simply walk away from our commitments. And neither should the Federal Government.

In closing, Mr. Chairman, it is notable that only one Suffolk County beach will continue to be nourished with Federal help if the President's budget is accepted. That is the beach at Westhampton Dunes, which is the subject of a court order. While I am glad this beach at least will continue to be cared for, I do not think judges should bear the responsibility for setting America's coastal policy. That is a job for Congress and for state and local governments, working together.

Thank you.

RESPONSES BY STEVE LEVY TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. The Administration is backing out of ongoing legal commitments to local communities for beach renourishment projects. In your discussions with your colleagues in New York and in other coastal states, can you describe for me the level of concern that people appear to have with the proposals made in the President's Budget? You are asking this Committee to use WRDA 2004 to remind the Corps that periodic beach renourishment is part and parcel of legally binding Project Cooperation Agreements. Could you elaborate on this situation and tell us why a legislative solution is needed?

Response. Your questions highlight the overarching concern of local government officials regarding whether our Federal partner will continue the longstanding commitment of financial and other resources for assisting local governments protect the nation's coastline. While my colleagues in local government are ready, willing, and able to assist in this important policy arena, we cannot afford to bear the burden alone. The technical and financial resources required are beyond those available to local governments.

Our concern over the Administration's commitment is evidenced by its budget proposal. Shore protection funding proposed by the President for Fiscal Year 2006 is \$46,787,000. This figure is 32.3 percent lower than the President proposed for fiscal year 2005 and 60 percent lower than the \$112.2 million enacted into law by Congress for fiscal year 1905 (excluding \$61.6 million for periodic renourishment in Florida and South Carolina in response to hurricanes in 2004). This concern is further heightened as the White House Office of Management and Budget once again proposed that periodic beach renourishment be a 100 percent local responsibility.

Since I testified before the Senate Environment and Public Works Subcommittee on Transportation and Infrastructure last year, the level of local concern of all coast-

al communities has been amplified by the devastating effects of Hurricanes Katrina and Rita on the Gulf coast. Locally, these events have once again highlighted the need for completion and implementation of the Fire Island to Montauk Point Reformation Study in order to protect 83 miles of Long Island's south shore communities. When completed, it is anticipated that the study will provide the basis for developing coastal protection plans for other areas, locally and nationally. The Federal Government must not delay any longer and must provide the financial, technical, and staff resources necessary to complete this long-term hurricane and erosion control project, which the Army Corps of Engineers has been developing on-and-off since the 1980's.

As important as completion of the FIMP is to the region, there is an immediate—intermediate—need to address the severe damage that has been inflicted on the south shore of Long Island. Earlier this year, County and Town of Southampton officials met with State and Federal officials in an attempt to comprehensively address specific areas of the coast that were the subject of “emergency declarations.” Measures of a short-term temporary nature had to be taken and were paid for by the town and county. These areas have been further impacted—as have additional discrete areas along the coast—by the intense weather that has pounded the northeast region over the past months. The combination of extensive rain and winds has exacerbated erosion, and we are now entering the winter weather season with beaches and portions of our coast already severely eroded and compromised. I have enclosed a letter to Mr. James Tuffey, Director of the New York State Emergency Management Office that provides a snapshot of the damage inflicted along the Suffolk County coast.

Protection of the barrier islands, ocean dune systems and marshes is a key component needed to minimize the impacts of storm surge and wave action on low lying south shore communities. I joined with my counterpart from Nassau in meetings with congressional and Senate delegations on September 20th to seek adequate funding for disaster preparedness, and I urged that the FIMP should be considered a related and integral part of such planning to prevent avoidable consequences from storm driven flooding and beach erosion on mainland communities.

COUNTY OF SUFFOLK,
Yaphank, NY, October 27, 2005.

Mr. JAMES TUFFEY, *Director,*
New York State Emergency Management Office
Building No. 22, Suite 101
1220 Washington Avenue
Albany, NY.

DEAR DIRECTOR TUFFEY: On behalf of Suffolk County, we would like to advise you of the severity of the beach erosion that our outlying coastal areas have sustained as a result of the severe weather conditions during the week of October 17.

The following section describes the details of the extent of damage in the coastal areas of Suffolk County:

Smith Point County Park. The park, located on the Atlantic Ocean, is approximately six miles long, stretching from just west of the terminus of the William Floyd Parkway eastward to the Moriches Inlet.

Approximately 2 miles of primary dune had been impacted by erosion removing about 30'–50' of dune that had been on the average 10 feet high. That loss could equal up to 500,000 cubic yards of sand. Majority of the six miles of beach dropped in elevation between 3–6 feet making the dune line more vulnerable than it was.

In two places, the toe of the dune is now less than 30' from Burma Road, a sand road used by fisherman and others to reach the west side of the Moriches Inlet. Previously the road was well behind the dune line except in the area of last winter's washover.

The beach appears to narrow dramatically looking west from Smith Point toward the Fire Island National Seashore.

Cupsogue. This park is located on the Atlantic Ocean at the western end of Dune Road, west of the Village of West Hampton Dunes and east of the Moriches Inlet.

There has been significant erosion that occurred in the beach. Minimum dune erosion has occurred. Sand lost is estimated at 60,000 cubic yards.

Meschutt. This park is located on the northeast corner of the Shinnecock Canal on the Great Peconic Bay.

General erosion of the beach produced a cut line directly in front of the main pavilion, dropping the elevation of the beach about 3 feet.

Theodore Roosevelt County Park. Located in Montauk, its outer beach on the Block Island Sound is popular with fishermen, campers and day trippers.

Shagwong Point suffered significant bluff erosion, as it has in most severe storms over the last decade. There are 2.5 miles of beach from East Lake Drive to Shagwong Point were reduced in width by half the normal 120' width.

Indian Island County Park. Located in Riverhead at the outflow of the Peconic River into Flanders Bay.

Bluffs at the easternmost tip of the park were severely eroded in two locations. Approximately 40' of the 120-foot high bluffs were eroded over a distance of 150 yards.

The park road and the picnic area, along with a scenic overlook are immediately threatened. Remediation work is needed. The area is extremely vulnerable to damage from a minor northeast storm.

Shinnecock East. Located on the Atlantic Ocean at the western end of Dune Road/Beach Road in Southampton on the east side of the Shinnecock Canal.

No discernable damage observed.

The following reports from the townships reporting the extent of erosion:

Town of Babylon. There has been moderate erosion along the beach coastline with the heaviest damage in the area of Gilgo Beach.

Town of Brookhaven. There has been light to moderate beach erosion at the Great Gun Beach, extreme erosion in Davis Park, and moderate to heavy erosion in the beaches of Mount Sinai to Port Jefferson. The south shore of the Brookhaven township suffered light to moderate erosion in certain areas of the beaches.

Town of East Hampton. There has been heavy erosion all around the Montauk coastline. Beaches in downtown Montauk are wiped out. Sand had to be placed in some alleyways that led to the beach between buildings to keep water from spilling into the streets. There has been significant damage to the whole area.

Hog Creek experienced a collapsed steel bulkhead. It is shoaling and is close to being closed. There is shoaling in many channels around the area. Sand that was previously cleared out of the Accobonac Harbor filled back in and needs to be removed again.

Town of Huntington. There has been heavy erosion in the following beaches: Hobart Beach, Crescent Beach, Centerport Beach, West Neck Beach, Crab Meadow Beach, and the Makanaian Beach. The \$33,000 worth of sand that was installed along the coast to repair winter erosion has been totally washed away and needs to be replaced.

Town of Islip. The Fire Island beaches have suffered major erosion. On a high tide, the water now reaches the snow fence and the base of the dunes. Atlantique suffered a washover but did not totally destroy the main dune. Officials expect washover again in the future at Cornielle, which is Ocean Beach and Atlantique. A lot of the lower beach has been washed away. The beach is very fragile at this time and some houses may be at risk.

Town of Riverhead. The whole North Shore experienced very heavy erosion and lost several feet of sand. Creek Road eroded to the bulkhead.

Shelter Island. There has been heavy erosion by Ram Island and Shell Beach Road was broken up during the past storm. Moderate erosion occurred on the west side of the island, moderate erosion on the north side, and the south side is expected to experience flooding from the bays.

Town of Smithtown. There has been moderate to heavy erosion on Bluff Overlook and Callahan Beach.

Town of Southampton. There has been moderate to heavy erosion on the eastern part of the town. Tiana Beach area has suffered moderate erosion. Westhampton Beach lost significant amounts of sand. Several houses may be in jeopardy in future storms.

Town of Southold. Greenport area suffered some washout around the bluffs. There has also been some minor erosion around both shorelines.

Fishers Island. There has been minimal damage to the beach area during the storm of October 17.

Based on the above reports, Suffolk County would like to officially inform you that we have a grave concern that future storms would put these already vulnerable beach areas in more peril and severe damage. We strongly urge that you contact the New York State Department of Environmental Conservation and have the NYSDEC send their erosion experts to inspect and document our already battered beaches.

Thank you.
Sincerely,

JOSEPH F. WILLIAMS,
Commissioner.

STATEMENT OF MICHAEL A. LEONE, CHAIRMAN, AMERICAN ASSOCIATION OF
PORT AUTHORITIES

INTRODUCTION

Good afternoon. I am Michael A. Leone, Chairman of the American Association of Port Authorities (AAPA) and Port Director of the Massachusetts Port Authority. Founded in 1912, AAPA represents virtually every U.S. public port agency, as well as the major port agencies in Canada, Latin America, and the Caribbean. AAPA members are public entities mandated by law to serve public purposes, primarily the facilitation of waterborne commerce and the generation of local and regional economic growth. I am testifying today on behalf of the 82 U.S. public port members of the American Association of Port Authorities.

AAPA commends you, Mr. Chairman, for calling this hearing to address the role of the U.S. Army Corps of Engineers (Corps) in meeting the nation's water resources needs. This Nation has been served well by regular authorizations of the Water Resources Development Act (WRDA), and returning this legislation to its biennial cycle will be of great value to the Corps, U.S. public ports, shippers and carriers and our trade partners throughout the world.

Today, I plan to highlight the role of ports in the U.S. economy; the status of our nation's navigation system; the historic role of the U.S. Army Corps of Engineers in meeting the needs of U.S. ports; the need for enactment of a Water Resources Development Act of 2004; and ways to improve the nation's deep-draft navigation system through more seamless partnerships between public port authorities and the Corps of Engineers.

ROLE OF PORTS IN U.S. ECONOMY

America's port system comprises more than 100 public port authorities located along the Atlantic, Pacific, Gulf and Great Lakes coasts, as well as in Alaska, Hawaii, Puerto Rico, Guam and the U.S. Virgin Islands. This committee undoubtedly knows the value of ports and waterborne commerce to the nation's economy. U.S. public ports provide the vital link for getting goods to the nation's consumers and transporting exports overseas. Deep-draft ports, which accommodate oceangoing vessels, move more than 95 percent of U.S. overseas trade by volume and 75 percent of U.S. overseas trade by value.

Every community in this Nation is served by U.S. ports, as they provide gateways for a variety of exported commodities, including forest products, coal, corn and soybeans, iron, petroleum, steel, machinery and manufactured goods. In addition to linking U.S. products to the world community, ports enable U.S. consumers to enjoy a wide selection of imported products, such as automobiles, toys, athletic shoes and winter fruit. This flow of goods extends well across state lines, as each state relies on between 13 to 15 ports on average to handle 95 percent of its imports and exports.

This constant commerce has a major impact on the communities ports serve. Public ports are considerable contributors to the national economy, as well as state and local economies. Ports provide 13 million direct and indirect jobs, accounting for nearly \$500 billion in personal income. U.S. ports contribute \$743 billion to the Gross Domestic Product, as trade has increased over the past 30 years from 13 percent to 30 percent of U.S. GDP.

In addition to this positive effect on the national economy, ports generate significant amounts of revenue for Federal, state and local governments. Ports and port users contribute approximately \$200 billion in Federal, state and local taxes. Of this amount, \$16 billion is generated directly from U.S. Customs duty revenues on imported goods.

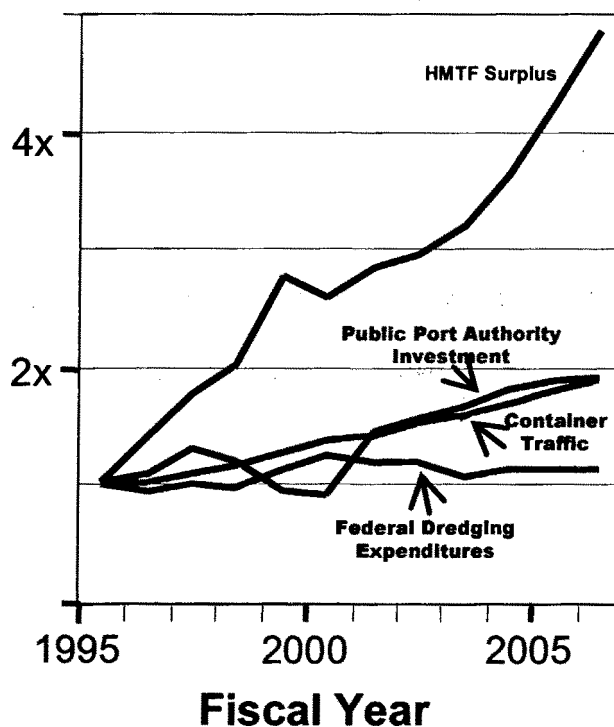
Ports also play an important role in economic development. The fast-growing cruise industry, for example, is enjoying robust demand for cruise vacations as nearly 8 million North Americans cruised in 2003, a 6.9 percent increase over 2002. Cruise lines now depart from 24 port cities and call on 48 ports in North America.

While maritime functions are certainly the most visible and traditional activities associated with ports, port authority activities may also include airports, bridges, tunnels, commuter rail systems, inland river or shallow-draft barge terminals, industrial parks, Foreign Trade Zones, world trade centers, terminal or shortline rail-

roads, shipyards, dredging, marinas, and various public recreational facilities. Public ports also play a critical role in our national security, peacekeeping and humanitarian efforts around the world. In particular, ports support the mobilization, deployment and resupply of U.S. military forces.

Public port authorities also make substantial investments in the nation's port and harbor infrastructure. In 2002, AAPA member port authorities invested more than \$1.7 billion in capital improvement projects. Next year, port authorities will invest nearly twice as much as they did in 1995 (\$2.2 billion vs. \$1.2 billion), a rate of increase that closely matches the growth rate for containers moving through ports (see Figure 1). While state and local authorities have historically been responsible for land-side development, in the Water Resources Development Act of 1986 (WRDA 1986), Congress enacted significant cost-sharing requirements for Federal navigation projects. Significantly, these require public port authorities to provide, among other things, half of the cost of feasibility studies and between 35 and 60 percent of the cost of construction for congressionally authorized harbor navigation projects. WRDA 1986 also permits non-Federal sponsors to undertake feasibility studies at full non-Federal expense or to contribute in-kind services in lieu of cash on Department of the Army-led projects. The full cost of Federal maintenance of harbor projects is funded by port and harbor users.

Figure 1.
FEDERAL INVESTMENT LAGGING
Trust Fund Surplus Skyrocketing



To keep goods and people moving through U.S. ports, the nation's deep-draft navigation system needs to be well-maintained, and the system needs to be able to grow to keep pace with changes in the global shipping industry. The U.S. Marine Transportation System (MTS) is facing a number of constraints that hamper the system's effectiveness, and, if not addressed, threaten U.S. economic and national security.

STATUS OF THE MARINE TRANSPORTATION SYSTEM

Demand on the MTS is growing. As I mentioned, 95 percent of U.S. overseas trade moves through U.S. ports. While total trade is expected to double over the next 20 years, the growth in container movements through U.S. ports is doubling every 10 years. Figure 1 illustrates that the number of containers moving through U.S. ports next year will be nearly twice the number in 1995 (*21 million* vs. *11.4 million*). The exploding demand for containerized transportation is not only driving the doubling of investment in land-side infrastructure by port authorities, but ocean carriers are also responding to the increased demand for their services by building larger and larger vessels.

Currently, there are about 60 post-Panamax ships in service, and several worldwide shipping industry consulting firms are reporting that more ocean carriers are placing orders for ships that exceed this size. For example, Drewry Shipping Consultants, Ltd., reports that there are 15 vessels of 8,000 TEU capacity that will enter the global shipping fleet this year, with an additional 20 more to follow in 2005. The construction of post-Panamax size container ships reflects the dramatic increase in total industry capacity, which will grow by approximately 60 percent per year to 1.1 million TEUs by 2007. The average draft of current post-Panamax ships is 42.9 feet. The largest ships have drafts of about 45.5 feet, which require channels that are at least 50 feet deep. The growth of these container vessels will require deeper navigation channels, which will require significant contributions from both the Federal Government and local project sponsors.

Port expansion to handle the exploding trade is straining the capacity of port communities. Congestion at freight terminals is growing, as motor carriers and rail companies are struggling to keep up with the cargo moving through ports on increasingly larger vessels. Port authorities and the Corps of Engineers are finding it increasingly difficult to plan, construct and maintain needed improvement projects. Port authorities understand their responsibility to develop sustainable projects, and a substantial cost of all port and harbor projects is for environmental mitigation or enhancement. AAPA encourages the development of multi-objective port and harbor projects consistent with congressional cost-sharing authorities.

Dealing with the physical pressures and financial constraints on the nation's transportation system is the challenge this committee is called to address. Our nation's deep-draft navigational system is at a crossroads, and its future has the potential to be bright or to be bleak. The Corps has a key role to play in this process, and the direction the Corps is given by Congress in WRDA legislation will be critical to the future of the MTS.

ROLE OF THE CORPS OF ENGINEERS

Throughout its 200-plus year history, the Corps has been charged with providing quality, responsive engineering services to the Army and the Nation. Since 1802, the Corps has focused on managing the nation's water resources effectively. Traditional work done by the Corps has focused on navigation, flood control and irrigation. Creating channels for shipping and transportation, as well as maintaining those channels, has been an activity for the Corps throughout its history.

Since the 1970's, the Corps' mission has expanded to include environmental restoration and protection, recreation, and water supply. While these new missions are also served by other Federal agencies, only the Corps of Engineers is charged with designing, building, and maintaining the nation's navigation system. Even while the Corps' mission areas have increased, funding for the Corps' Civil Works Program has decreased by 50 percent in the last 30 years and now stands at roughly the same level it was around 1960. The Corps' primary responsibility to the Nation must be to keep navigation channels open and navigable for the transportation of people, goods and military needs. As funding for the Corps continues to be restrained, AAPA urges this committee to ensure the Corps' navigation mission receives your highest priority in this year's WRDA bill.

Construction and maintenance needs of the nation's deep-draft navigation system are not being met. Ongoing, budgeted construction projects have not been completed, due to the low funding levels being allocated for Corps' civil functions. The President's proposed fiscal year 2005 budget would reduce deep-draft project construction funding by more than \$40 million compared to the fiscal year 2004 enacted level. AAPA estimates that deep-draft projects need approximately \$500 million for construction in fiscal year 2005, more than double the President's proposed funding level. As shown in Figure 1, spending by the Corps of Engineers on deep-draft navigation is barely higher than 10 years ago (*\$929 million* vs. *\$755 million*), and clearly not meeting the challenge of a doubling in container volumes during that period or keeping pace with the investment of public port authorities.

Operations and maintenance (O&M) funding is also struggling to keep pace with the navigation system's needs. For fiscal year 2005, the Administration has proposed \$600 million for O&M, well short of the \$735 million needed to address the needs of the nation's deep-draft navigation system. This shortfall in funding is especially frustrating to ports, as there is a dedicated source of O&M funding that is not being used to its full potential.

The Harbor Maintenance Trust Fund (HMTF) is a repository for funds collected by the Harbor Maintenance Tax. Funds in the HMTF are dedicated toward funding the Federal share of O&M costs associated with maintaining the nation's deep-draft navigation channels. However, the use of the tax for other purposes is increasing at an alarming rate. The Administration's recent budget request estimates that the surplus in the HMTF will grow to more than \$2.6 billion in fiscal year 2005, more than four times the level in 1995 (\$626 million). At the rate of spending outlined in the Administration's request, the HMTF surplus will likely reach \$5 billion by the end of the decade (see Figure 1).

ENACTING WRDA 2004

There is a critical need for Congress to move forward on WRDA this year. As I stated earlier, local port agencies rely on the authorization of studies and construction to make needed improvements to the nation's deep-draft navigation system. AAPA urges the Senate to pass WRDA in 2004 to allow our Nation to reap the economic benefits of increased trade. Attached is a letter of support for quick action on WRDA signed by 33 port directors.

Since the passage of WRDA 1986, Congress has worked to reauthorize this legislation on a biennial basis. Its regular reauthorization is critical in enabling U.S. port authorities to plan needed studies of, and improvements to, the nation's deep-draft navigation system. The last WRDA was enacted in 2000, and on behalf of AAPA, I urge this Committee to move forward on reauthorization of this law expeditiously. Further delay in authorizing vital navigation projects will increase the cost of navigation projects, create uncertainty for U.S. ports in business planning, and negatively impact the flow of commerce through port communities all across the Nation.

With WRDA 2004, this Committee can significantly refocus water resources policy in this Nation, making this legislation as important to water policy and the work of the Corps as WRDA 1986 was and continues to be. To that end, AAPA has a number of specific recommendations regarding water resources policy and Corps modernization that I urge this Committee to consider as it moves forward on WRDA.

I would first ask this Committee to address the growing surplus in the Harbor Maintenance Trust Fund (HMTF). The Harbor Maintenance Tax, levied on imports and domestic cargo, contributes a significant amount of revenue to the HMTF each year, and as trade continues to increase, the contributions to the HMTF are growing. While these funds are dedicated toward maintenance of Federal navigation of channels—specifically through dredging—their utilization has not kept pace with their collection or with the maintenance dredging needs at ports.

Operations and maintenance needs on the deep-draft navigation system are not being met. Rather than allowing the HMTF surplus to continue to grow unchecked, AAPA urges Congress to better utilize these funds for their intended purpose. Specifically, I urge this Committee to authorize guaranteed funding of the HMTF, ensuring that the funds collected are spent, similar to the treatment of the Highway Trust Fund.

Additionally, AAPA believes that local sponsors are providing a greater share of the cost of navigation channel deepening projects than Congress expected when it mandated cost sharing in 1986. AAPA recommends that Section 101 of WRDA 1986 be amended to revise the definition of deep-draft harbor and the cost-sharing formula to reflect the changes that have occurred in the general cargo fleet.

AAPA also urges this Committee to consider seven proposals to modernize the Corps of Engineers, improve its relationship with local sponsors of deep-draft improvement projects and more efficiently manage the water resources of this Nation:

- *Partnership Agreements.* AAPA believes there are fundamental disparities in the partnership relationship between the Corps of Engineers and local sponsors that should be corrected. AAPA recommends that WRDA 1986 be amended to reference partnership agreements and that the process of negotiating and implementing agreements be improved.

- *Credit for In-Kind Work During Construction.* AAPA recommends adoption of a provision allowing local sponsors credit for in-kind services during construction of a project.

- *Port and Harbor Dues.* AAPA believes that ports should have broad authority to levy fees for raising the local share of Federal dredging projects. AAPA believes common law and precedent provide this authority, but that Section 208 of WRDA 1986 severely limits this ability. AAPA recommends that all of Section 208 be replaced by a general authority restating the common law principle that ports can assess fees to recoup the cost of their services.

- *Utility Relocation.* AAPA believes that the Corps should exercise its authority under Section 10 of the Rivers and Harbors Act and/or its navigation servitude powers to direct the removal and/or relocation of utilities within navigation channels. AAPA recommends that Section 101(a)(4) of WRDA 1986 be deleted, and that report language should express Congress' view that the Corps should exercise its existing authority to direct the removal and/or relocation of utilities within navigation channels at 100 percent owner expense.

- *Indemnification.* Because many ports are prohibited by state anti-deficiency laws from providing indemnification to the Federal Government, AAPA recommends that Section 101(e)(2) of WRDA 1986 be deleted. AAPA could support alternative language that would allow for the purchase of indemnification insurance for both the Federal Government and the local sponsor as an allowable project cost.

- *Local Sponsor-Initiated Projects.* AAPA believes the procedures for local sponsor-initiated projects should be streamlined. AAPA recommends that Sections 204 and 205 of WRDA 1986 be amended to allow for: (1) the reimbursement of projects which are constructed by the local sponsor without prior approval by the Chief of Engineers and authorization by Congress; and, (2) the assumption of maintenance by the Corps for such projects.

- *Corps Dredge Fleet.* AAPA urges Congress to enact policies that will ensure adequate capacity and the availability of dredging equipment to meet dredging needs. Specifically, AAPA urges Congress to direct the Corps of Engineers to analyze the costs and benefits of existing and proposed restrictions on the use of the Corps' hopper dredge fleet. Congress should allow the Corps fleet to operate unconstrained by statutory and administrative restrictions for a specified period of time so an accurate assessment of the fleet's true costs can be determined.

The U.S. House of Representatives passed a WRDA bill, H.R. 2557, on September 26, 2003, which included a number of the recommendations discussed above as well as several Corps "reform" provisions. We believe that the House's Herculean effort last year strikes an appropriate balance on these Corps reform issues, and we urge the Senate to not reopen these issues as it considers WRDA this year. AAPA believes that if included in a WRDA bill, these policy recommendations will significantly improve the efficiency and effectiveness of the Corps and of the U.S. deep-draft navigation system. Further delays in authorizing projects and in clarifying important Corps of Engineers policies will add unnecessarily to the cost of projects and defer much-needed transportation cost savings, job creation and economic development in communities across the country.

BEYOND LEGISLATION: SEAMLESS FEDERAL-PORT PARTNERSHIPS

While AAPA believes that legislation is necessary to make important changes to the way that the Corps works with its local water resources partners, we are also working in other ways to improve our industry's partnership with the Federal Government. Specifically, AAPA has recently launched a Quality Partnership Initiative (QPI) to positively affect the dialog between U.S. public port authorities and the Corps. The QPI involves several major elements, including seeking the legislative changes discussed above, developing a project performance evaluation system, the development of a best practices data base, and focused training and technical and policy support.

Last week, at AAPA's Spring Conference, I signed a Memorandum of Understanding (MOU) with Assistant Secretary of the Army for Civil Works John Paul Woodley. This document sets forth a series of shared principles of our two organizations, and it dedicates both parties toward increased communication on formal and informal projects that move these principles forward. Specifically, AAPA and the Secretary's office recognize the unique nature of being cost-sharing partners, the common mission to facilitate commerce through ports and harbors and the importance of developing cooperative projects, resolving disputes early, and finding innovative and mutually beneficial solutions to problems.

As part of AAPA's upcoming Harbors, Navigation and Environment Committee Seminar this May in New Orleans, we will hold three half-day workshops on several critical QPI-related topics, including project cooperation agreements and project coordination teams, performance measures for Corps of Engineers projects, and strategies for assessing, remediating, and reusing contaminated properties and water-

ways. The public port industry recognizes that critical challenges face us, and we are ready to offer our services to find solutions.

CONCLUSION

In conclusion, Mr. Chairman, there is a significant opportunity for this Committee to refocus the water resources policy of this Nation with passage of WRDA 2004. AAPA looks forward to working with this Committee to modernize the Corps of Engineers and address funding shortfalls for the development and maintenance of the deep-draft navigation system. The benefits of our cooperation and dedication will be increased trade, meaningful economic impact on communities all across the country and more jobs for hard-working Americans. AAPA appreciates your leadership on behalf of the U.S. port community. This concludes my testimony.

RESPONSE BY MICHAEL LEONE TO ADDITIONAL QUESTION FROM SENATOR JEFFORDS

Question. You have stated that there are millions of dollars of surplus in the Inland Waterways and Harbor Maintenance Trust Funds, yet rehabilitation, operation and maintenance needs are going unmet. What should be done to reduce these surpluses?

Response. I will speak specifically to the Harbor Maintenance Trust Fund or HMTF which impacts the port industry directly. I believe the principle reason these surpluses have grown while needs go unmet is lack of sufficient budget authority for the Corps of Engineers to spend adequately and then draw reimbursement from the fund. The Water Resources Development Act of 1986 created the concept of non-Federal navigation interests paying for channel maintenance and established the ad-valorem tax on cargoes for both imports and exports with the tax receipts deposited in the HMTF. The intent of Congress was to insure that adequate funds would be available to keep the Nation's ports and harbors dredged to authorized depths. Subsequently the Supreme Court declared the export tax to be unconstitutional. However, even with just import taxes collected now, the HMTF has developed a surplus of over \$2.5 billion. We find that to be unacceptable given the lack of adequate maintenance at many of the Nation's ports. For ports and harbors maintenance dredging the Corps expends funds from the general treasury in accordance with appropriations or budget authority from the Congress with 100 percent reimbursement to the Treasury from the HMTF. In effect there is a 100 percent offset to appropriated general treasury funds paid for by non-Federal interests, specifically shippers who rely on the availability of authorized channel dimensions at ports and harbors covered by the HMTF. The existence of the large surplus suggests that not only are needs going unmet but that the required dredging is in fact pre-paid well into the future.

I mentioned an increase of the Corps budget authority as a possible solution. Another possible solution would be to amend legislation pertaining to the HMTF to allow annual spending for maintenance dredging to be no less than the previous years' collection. Right now, collection of the tax amounts to about \$700 million annually while the Corps, after subtracting certain administrative and other charges, will spend less than \$600 million for maintenance of channels. Spending the revenue received would result in around an additional \$100 million annually. We recommend that alternative solutions like the ones I just described be fully evaluated as potential solutions to this growing problem.

STATEMENT OF WILLIAM G. HOWLAND, BASIN PROGRAM MANAGER, LAKE CHAMPLAIN BASIN PROGRAM, GRAND ISLE, VT

Chairman Inhofe, Ranking Member Jeffords, Subcommittee Chair Bond and Ranking Member Reid, and distinguished members of the committee, thank you for inviting me here today to testify about the role of the U.S. Army Corps of Engineers in meeting the nation's water resources needs.

I would like to speak today about the tremendously important role presently played by the Army Corps in addressing the most fundamental needs of American citizens: clean water to drink and a healthy place to live.

Before taking up my position managing the Lake Champlain Basin Program nearly 5 years ago, I had been a staff scientist in an environmental engineering firm, a member of the research faculty at McGill University specializing in military geosciences with a doctorate in biophysical remote sensing, and later on the faculty at the University of Vermont and at Middlebury College. I have an understanding of the main water quality challenges facing large lakes across the Nation. And I appre-

ciate the pressing need for Federal leadership in repairing and restoring ecosystems that have been impaired through the development of our American society.

The Lake Champlain Basin Program, which I manage, is a bi-state and international partnership to restore water quality and improve the economy of the Lake Champlain Basin. Our partnership involves the states of Vermont and New York, the Province of Quebec, and numerous Federal agencies, including the USEPA, the USDA, USDI, and the USACE. This partnership is highly effective and through our work to restore the lake ecosystem, we also are ensuring an economic future for citizens in our region. This work is of vital importance to the regional economy, including the tourism and recreation economy for which we are well known, and which depends so fundamentally upon this great and wonderful lake.

One of the great discoveries in my work with the Lake Champlain Basin Program's Federal agency partners is the good faith and dedication that they bring to the task of cleaning up and restoring America's waterways. I have great admiration and appreciation for all of our Federal partners. Today, my testimony will focus on the essential work of the U.S. Army Corps of Engineers, and particularly their role in Environmental Restoration projects.

Cleaning up pollution in a lake is exceedingly difficult and costly. And it always includes interrupting the flow of pollutants into the drainage system to prevent further contamination. Pollution prevention requires changing the way things work in the landscape that drains into the lake. In Lake Champlain, as in the Great Lakes and other parts of the Nation, ecosystem restoration efforts often require advanced engineering design expertise and leadership that communities and states simply cannot provide.

The competence and engineering expertise of the U.S. Army Corps of Engineers is a vital resource for planning, designing and executing restoration plans. The stature of the Corps, its track record with large projects and its quality control protocols provide the leadership that is essential to maintain and improve the water quality of our rivers and lakes.

The U.S. Army Corps is currently facilitating several restoration projects in the Lake Champlain watershed. With the Corp's support, an infestation of water chestnut, an invasive aquatic plant that has dominated the entire southern part of the lake for years is now nearly under control. This program, run in partnership with the states of Vermont and New York, has lead us out of an almost hopeless situation and we are seeing a return to public enjoyment of shoreline areas in the southern part of Lake Champlain.

This summer we expect to begin work on projects to intercept storm water runoff into Lake George, part of the Lake Champlain ecosystem, and to stabilize eroding streambanks in the Missisquoi watershed, with expertise, oversight and funding by the U.S. Army Corps. Without their leadership and support, this vital work could not happen.

The role of the U.S. Army Corp's Environmental Restoration authority is a vital nationwide asset; getting projects done—and done professionally—all across America. Dam removal projects, wetland restoration, fish passages and streambank stabilization projects restore degraded ecosystems, improve American lives, strengthen our nation's economy and ensure that we will be able to provide clean drinking water to ourselves, our children and their children.

Lake St. Clair, and the St. Clair River, located between Lake Huron and Lake Erie, faces massive problems of nutrient loading, invasive species and the challenges of a busy waterway. It is in desperate need of pollution prevention and ecosystem restoration action. The U.S. Army Corps of Engineers has taken the lead role in drawing together Federal agencies and communities in the U.S. and Canada to address this international challenge. The stature and expertise of the Corps, and its mandate to develop a management plan, under Section 246 of WRDA 1999, placed it in the logical lead in this important effort.

One of the greatest restoration programs in the history of our Nation is underway in the Everglades and South Florida Ecosystem, with U.S. Army Corps leadership. The Comprehensive Everglades Restoration Plan approved by Congress in WRDA 2000 is the key to the future of the huge everglades ecosystem and the vitality of a significant sector of the Florida economy. Coordination of the work of eight Federal agencies and more than a hundred local stakeholder governments, regional councils and state agencies, could only be managed by an agency with the engineering capacity, traditions and commitment of the U.S. Army Corps.

From Texas to Mississippi in the Louisiana Coastal Area Ecosystem, wetlands are disappearing at the rate of nearly 22,000 acres per year. The U.S. Army Corps is a partner with the State of Louisiana on a feasibility study that will enable us to better understand this problem, and how to mitigate and minimize losses, to restore a future for this region. Similar case histories, of projects large and small, could be

cited from across the Nation, with the accolades and gratitude of millions of American citizens.

America today faces unprecedented challenges of ecosystem damage and resultant declines in water quality, contaminated and weed-infested waterways, and polluted lakes and estuaries across the Nation. These problems have compromised drinking water supplies for millions of Americans, caused desperate struggles for survival in the tourism and recreation industries, and created an alarming trend toward more and greater problems in the near future.

The U.S. Army Corps of Engineers is a vital part of our military service that works directly in the homeland to meet these challenges with the world's best professional expertise. Its stature and traditions of service to America have turned to environmental restoration projects that require engineering solutions. The Corps brings the best tools in the Nation to guide the engineering problem-solving that these special ecosystems require.

I would like to direct your attention to the challenges we face regarding the Corp's Continuing Authorities programs and Sections 206 and 1135. The existing program limits of \$25 million for each have simply not kept pace with current needs, and are now a fraction of what America needs them to be. In the Lake Champlain watershed, this means that several ongoing projects are being suspended due to a national shortfall.

Suspending good projects partway through their implementation, whether in Lake Champlain or elsewhere across the Nation, neither saves money nor avoids expense. The problems in each case will get far more costly, not less costly. The opportunities to prevent or contain pollution will be lost if a shortfall like this persists. The most cost-effective solution to large ecosystem problems is to invest adequately in their restoration at the earliest possible date. Any alternative is likely to be a false economy in the short term and result a burgeoning burden of additional accrued contamination and sharply increased costs of restoration in the long term.

Finally, the work of the U.S. Army Corps on environmental restoration is not only about conservation philosophy or environmental ethics. It is also about our nation's economic engines. As we know so well in the northeast, it is about the vitality of the tourism economy and the quality of life that keeps the recreation businesses in business. It is about trucks on the highway, the pulse of commerce and trade. It is about reducing bankruptcies and maintaining jobs. It is about smell of the tap water in the cities and towns across the Nation; it is about the health of our own human habitat throughout this Nation that is our future.

In the final analysis, ecosystem restoration and water quality is about insuring the quality of life for citizens across America, and the health of our children and their children for generations to come.

I hope the members of this Committee will continue to recognize, appreciate and support the vital role of the U.S. Army Corps of Engineers in service to the American homeland and, in particular, will fully support their Environmental Restoration programs.

Thank you for the invitation to testify before you today. I look forward to answering your questions.

STATEMENT OF MICHAEL CAMERON, TRUCKEE RIVER PROJECT DIRECTOR, THE
NATURE CONSERVANCY

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to testify on the Water Resources Development Act (WRDA). I am Michael Cameron, Truckee River Project Director for The Nature Conservancy in Nevada. I am here before you today to provide the Subcommittee specific recommendations on enhancing the Army Corps of Engineers (Corps) non-structural flood control and environmental restoration programs to better serve the needs of local communities in protecting and managing key water resources. These recommendations include:

- (1) Allow credit for ecosystem restoration work that is related to a flood control project and is locally implemented prior to project authorization,
- (2) Permit pre-Project Cooperation Agreement (PCA) credit in the Section 206 and 1135 programs for necessary project elements performed by the non-Federal sponsor,
- (3) Raise the programmatic ceilings for Corps' Sections 1135 and 206 Continuing Authority Programs (CAP) from \$25 million to \$100 million, and raise individual project ceilings under these authorities from \$5 million to \$10 million, and
- (4) Correct the problem of unlimited liability responsibility all accruing to the non-Federal sponsor for Continuing Authority Projects (CAP).

Most importantly, I would like to offer The Nature Conservancy's support for passage of WRDA this year.

The Nature Conservancy is dedicated to preserving the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Conservancy has more than one million individual members and over 1900 corporate sponsors worldwide, and currently has programs in all 50 states and in 27 other nations. To date, our organization has protected more than 15 million acres in the United States, and has helped local partners protect approximately 102 million acres around the globe. Our conservation work is grounded in strong science, strong partnerships with other landowners, and tangible results at local places.

The Conservancy has been active in Nevada for 20 years, helping to protect treasures such as Ash Meadows, Red Rock Canyon, Stillwater Marsh, and Pyramid Lake. Nevada's arid Great Basin and Mojave Desert ecoregions rank fourth in the Nation for biodiversity, with hundreds of endemic species found nowhere else on the planet. Regarding rivers, Nevada is an arid state that has lost an estimated two-thirds of its floodplains and wetlands, even while 75 percent of plants and animals rely on these rivers at some point of the year or their life cycle. The Conservancy has worked for more than a decade to protect the Truckee River, which is Nevada's largest. Flowing 110 miles from its source at Lake Tahoe to its terminus at Pyramid Lake, the Truckee River is home to critical species such as the Lahontan cutthroat trout, cui ui fish, hundreds of nesting and migrating birds, and amphibians such as the northern leopard frog.

Over the last few years, the Conservancy has embraced the Corps as an important conservation partner. Our expanding partnership is reflected in our Sustainable Rivers Project, a joint effort focusing on dam reoperations on 10 ecologically significant river systems across the country. At another 19 sites we are collaborating with the Corps under CAP Sections 1135 and 206, and other Corps authorities, to protect and restore areas of critical ecological concern. While the Corps is an excellent and willing partner, policy and legislative constraints have often limited or prevented them from working successfully with local communities to achieve mutually agreed upon flood control and ecosystem restoration goals.

It is important to note that the Federal Government plays a critical role in flood control and ecosystem restoration. The past century has witnessed a serious decline in the ecological health of many of our nation's rivers. Much of this decline is the unintended consequence of Federal water development projects designed to provide public benefits such as flood control, electricity and irrigation. As communities recognize the importance of healthy rivers to their economic and social viability, and their needs and uses of their rivers evolve, it is important for the Federal Government to recognize and mitigate its mistakes while responding to, and helping to provide for, these changing needs. The Truckee River in Nevada is one such place, and serves as an excellent example of the willingness of the Corps to implement a local community's flood control and ecosystem restoration vision, while demonstrating the problems that limit the Corps' ability to achieve that vision.

The McCarran Ranch 1135 Project, for which the Conservancy is the non-Federal sponsor, will restore a 5 mile reach of the lower Truckee River, downstream of the Truckee Meadows Flood Control Project. In addition to receiving flood waters, the project will dramatically improve riparian and wetland habitats and water quality, and is serving as the model for the floodplain restoration strategies proposed in the Truckee Meadows Flood Control Project. The Conservancy, in expectation of the initiation of the 1135 project in late summer, has already restored one mile of the Truckee River on its own at a cost of over \$1 million, using funds from a variety of private and public sources.

From the community's perspective, these two projects are strongly interdependent, and the community is eager to see the McCarran Ranch 1135 project and complementary floodplain restoration work proposed upstream under the community preferred alternative for the Truckee Meadows Flood Control Project initiated and completed.

But, as of today, neither project is moving forward as intended, which brings me to the Conservancy's specific recommendations and the reasons we believe WRDA needs to be passed this year.

1. *Permit credit for ecosystem restoration work that is related to a flood control project and is locally implemented prior to project authorization.* Presently, the Corps may credit non-Federal sponsors for early implementation of flood walls, levees or other features that reduce flood damages if built to Corps standards and ultimately included in the authorized project. However, no similar authority exists for early implementation of floodplain or ecosystem restoration. For example, restoration of 60 miles of river downstream from Reno will likely be an integral part of

the forthcoming Truckee Meadows Flood Project. Because downstream restoration will effectively mitigate the higher flows from upstream, the Corps and non-Federal sponsors agree in principle that floodplain restoration elements need to be among the first implemented. Most of the flood protection benefits for Reno and Sparks will not be initiated until after implementation of the restoration elements.

The local sponsors of the Truckee Meadows Flood Control Project have both the land and the local funds needed to start ecosystem restoration now. However, they are inhibited because there is no mechanism for the Corps to credit the work. Allowing early restoration means implementation can proceed more quickly, perhaps accelerating the schedule by years. From the Conservancy's standpoint, this means that the ecological degradation of the Truckee can be halted sooner rather than later, firmly establishing the floodplain and riparian areas long before they receive significant flood waters.

2. *Permit pre-Project Cooperation Agreement (PCA) credit in the Section 206 and 1135 programs for necessary project elements performed by the non-Federal sponsor.* The PCA occurs after all of the Corps studies, planning, and designs are completed and the non-Federal project sponsor commits to the non-Federal share of the project. All of the Corps costs prior to signing the PCA are included in the cost of the project, while any work the non-Federal sponsor does prior to the PCA is not included or credited. The Conservancy proposes the local Corps District be permitted to give cost-share credit for work undertaken by the non-Federal partner within 5 years prior to signing the PCA and after the initial letter of intent. This credit could include such activities as pre-project monitoring and restoration activities. Credit will not be recognized beyond the non-Federal sponsor's cost share requirement and the Corps will not be liable for funds if the PCA is not ultimately signed.

3. *Raise the programmatic funding ceilings for Continuing Authority Programs (CAP) Sections 206 and 1135 from \$25 million to \$100 million per year nationally, and the per project ceilings from \$5 million to \$10 million.* The CAP 1135 and 206 projects are producing success stories, and demand nationally far exceeds available resources. There are distinct advantages both for the Corps and project sponsors to the relatively small CAP projects. Principally, the scope and cost of the work is more manageable, which expedites on-the-ground progress and participation of the local sponsor. Yet, the typical costs associated with ecosystem restoration such as re-vegetation or channel reconstruction can easily eclipse the Federal limit of \$5 million per project. The Conservancy is presently the non-Federal sponsor for 12 CAP projects around the country.

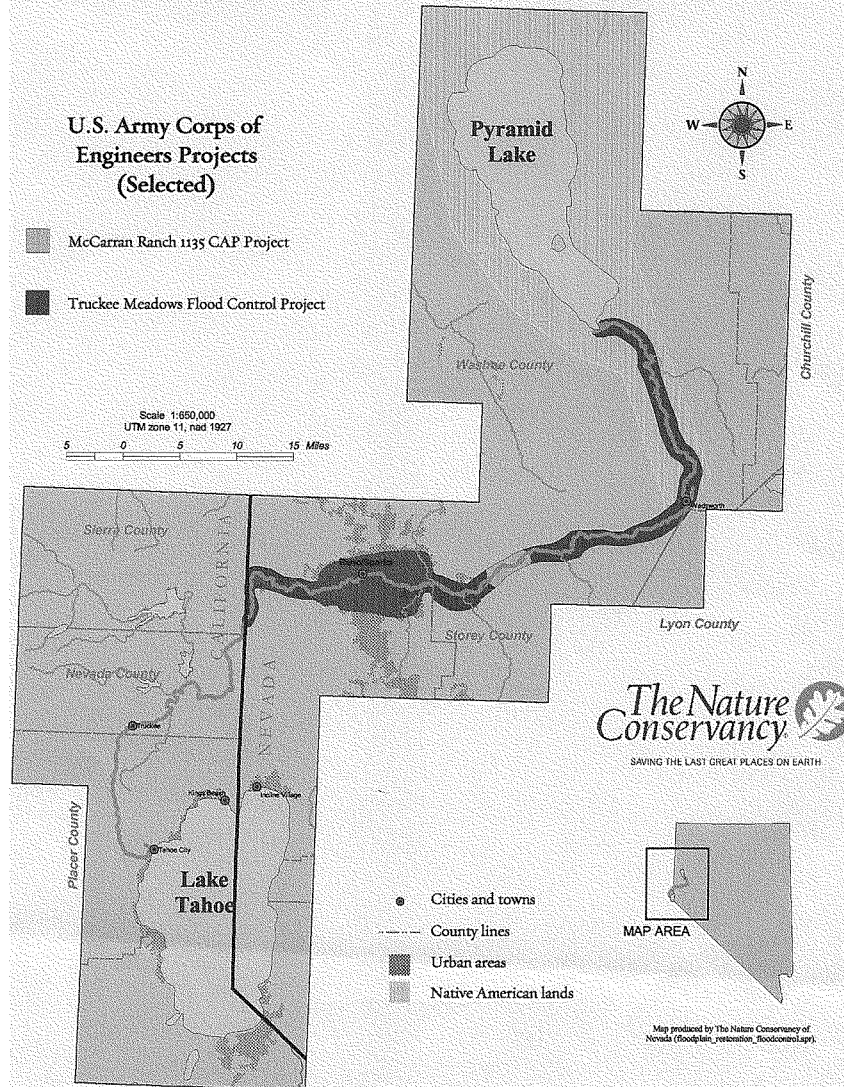
The McCarran Ranch 1135 Project, with an earmark from Congress in fiscal year 04, was on pace to meet its scheduled construction start this fiscal year; however, work has stopped due to the Corps' discovery that they have more projects than funding. Demand that now exceeds even the annual authorized limits for these programs. The Corps' decisionmaking and project management for the McCarran Ranch project has been exemplary, but those efficiencies are rendered meaningless when work stops due to lack of funds. Because the McCarran Ranch 1135 project is seen as a precursor to the much larger Truckee Meadows Flood Control Project, missing the implementation schedule will be an ominous sign to the community, and will have a corrosive effect on the remarkable local consensus that exists today.

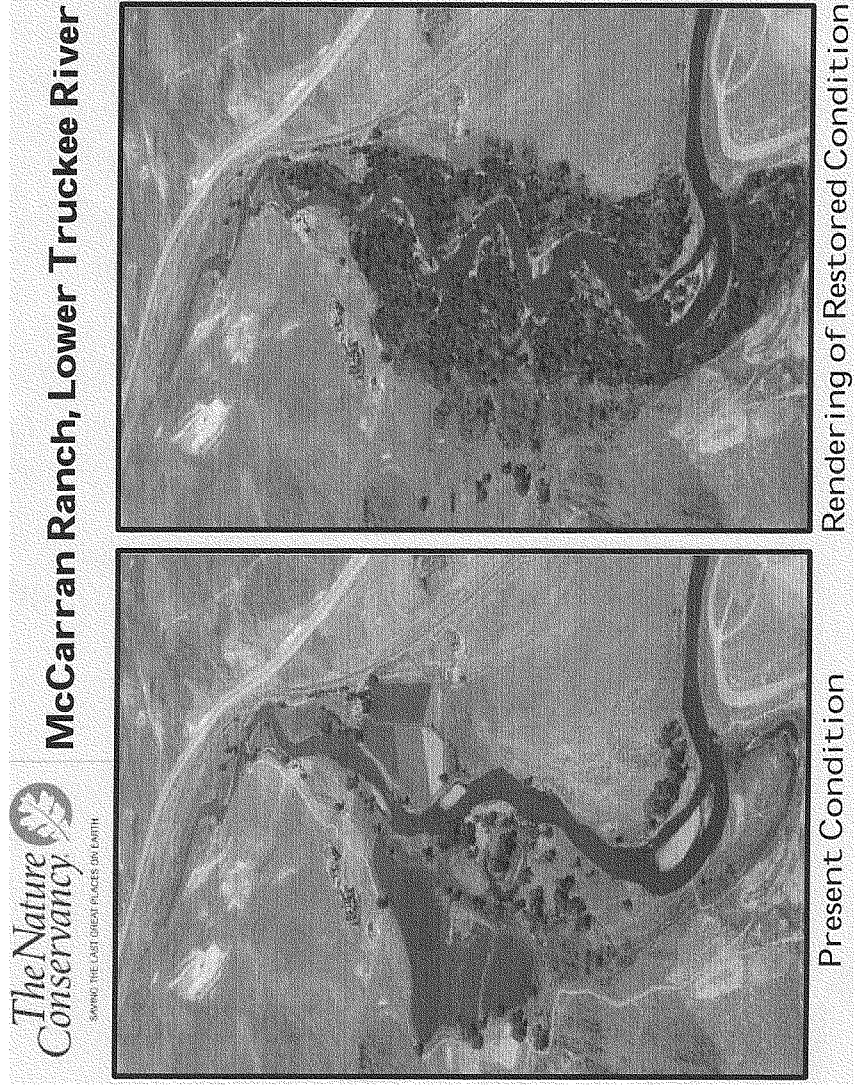
4. *Correct unlimited liability for non-Federal sponsor in Project Cooperation Agreements (PCA).* Presently, PCAs permit either party to stop a project if it exceeds agreed project costs. The unlimited liability problem is a clause in the PCA that permits the District Engineer to require a project to be completed at statutorily required cost share for the purposes of public health and safety and if the project exceeds the statutorily determined cap for Federal share then all additional costs become the responsibility of the non-Federal partner. The Conservancy proposes that in the event that the District Engineer determines a project needs to be continued for the purpose of public health and safety, the non-Federal sponsor will be responsible for increased project costs up to 20 percent over the original estimated project cost at the statutorily determined cost share. The Corps will assume all costs exceeding the 20 percent of the original estimated project cost, notwithstanding the statutorily determined Federal share cap.

In conclusion, the Truckee River experience suggests that the Corps is developing remarkable projects that achieve significant economic and environmental gains, and are highly responsive to local interests. Passage of WRDA this year will allow these successes to continue and increase, and we strongly urge the Subcommittee to take action and pass WRDA during this congressional session. I would like to thank the Chairman, Senator Reid, and the entire Subcommittee for the opportunity to share this testimony with you today.

TRUCKEE RIVER, NEVADA

FLOODPLAIN RESTORATION AND NON-STRUCTURAL FLOOD CONTROL





STATEMENT OF DOMINIC IZZO, AMERICAN SOCIETY OF CIVIL ENGINEERS

Mr. Chairman and Members of the subcommittee: Good afternoon. My name is Dominic Izzo. As you may know, I had the honor to serve as Principal Deputy Assistant Secretary of the Army for Civil Works from July 2001 until November 2002. I could not have done my job without the strong support of this Committee and its distinguished Members.

It's a great privilege for me to appear before this Committee today as a private citizen to testify on behalf of the American Society of Civil Engineers (ASCE) to present the Society's views on certain issues relating to the reauthorization of the Water Resources Development Act and the long-term future of the U.S. Army Corps of Engineers.*

I. CORPS "REFORM"

The U.S. Army Corps of Engineers has been subjected to a great deal of scrutiny in Congress and by the news media in recent years. That has led to widespread public criticism of the Corps and its programs. Some of that criticism is deserved; much of it is not. Regardless of one's view, we are again hearing an old Washington refrain it's time to "reform" the Corps of Engineers.

Let me state at the outset one important principle: the Corps of Engineers does not need major overhaul. Naturally, like any institution, it can work better. Of course this is as true of Congress and other large government agencies as it is of the Corps.

But I think the larger point needs to be made at the outset—this Nation needs the Corps of Engineers. It is uniquely situated to deal with large water resource projects having a distinct national or regional impact. No short-term process reforms, no matter how well intentioned or necessary, should be allowed to deflect the Corps from its mission of providing the comprehensive infrastructure and environmental protection this Nation needs to remain competitive and healthy.

II. AREAS FOR IMPROVEMENT

Certainly the Corps can improve the economic analysis of major construction projects. Better mathematical models may provide better projections. In the end, however, these are just estimates based on many assumptions and, like all estimates, they can change. The analytical process must include improved uncertainty analysis to ensure that decisionmakers are fully aware of the quality of the data on which they are relying to make judgments. This should not discourage Congress or the executive branch from accepting prudent risks, but it should lead them to emphasize projects with less uncertainty in their projections.

An important aspect of improving economic analysis and avoiding decisionmaking gridlock in Federal projects is establishing the economic value of environmental costs and benefits. Of course monetizing environmental costs and benefits is an extremely challenging task.¹ Done properly, it will facilitate determining appropriate mitigation for major economic projects, like channel deepening or terminal construction, and it will also support prioritization of those projects. Water resources interests would do well to support this effort because it will make environmental decisions more rational. This will require a revision of the venerated Principles and Guidelines.² The Administration would do well to pursue this overdue revision aggressively in coordination with the environmental community and industry.

*ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 130,000 civil engineers individually in private practice, government, industry and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c)(3) of the Internal Revenue Service rules.

¹Economists have developed a number of highly imperfect analytical tools to aid policymakers in determining the right balance between economic efficiency and environmental protection. At the center of the modern debate over investment projects and their impacts on the environment is "benefit-cost analysis" (BCA). BCA, which is founded on the need for tradeoffs among competing societal needs and wants, merely aggregates all preferences to determine a society's willingness to pay for a non-marketable good. In the United States, the Corps of Engineers had standardized the practice as early as the 1920's.

²U.S. Army Corps of Engineers, Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (1983) (hereinafter Principles and Guidelines). The 1983 P&G replaced the P&S of 1980 (non 1973), which were a CFR-codified modification of the 1973 P&S with expanded guidance on environmental quality. The 1980 date is important to those knowledgeable about the P&G, because it represents the carter Administration's decision to issue the P&S as CFR regulations that arguably were third-party enforceable. That action, late in the term, was what generated the vehement opposition to the P&S

Most importantly, the justification of large projects for investment by the Federal Government is a political decision. The principle that the benefits of the project must exceed the cost is a good one. But more than pure economic benefits and construction costs are at stake. There are political, economic, and environmental costs and benefits, and these must all be weighed carefully. To the extent that you in Congress and executive branch officials agree on assumptions and objectives in advance, technicians can clarify economic and environmental factors so that there will be meaningful public discussion as part of the political decisionmaking process. Setting priorities for government spending unquestionably requires a political decision. No mathematical or economic modeling can change this. It can only provide a better framework for making an informed decision.

Project sponsors must predict or estimate the benefits of economic development and the cost of construction as the basis for a Federal navigation and flood-control projects. They should also strive to identify the risks and assumptions inherent in those predictions. They should work together with other stakeholders, particularly conservationists, to establish environmental costs and benefits in economic terms that will justify appropriate mitigation when environmental damage is unavoidable. Such a methodology will produce a public record that should garner the political support necessary not just for a project authorization but also for a solid appropriation to build the project. Appropriations, after all, build projects while authorizations are just paper that may languish for years. Revising the Principles and Guidelines to emphasize uncertainty analysis and the economic value of environmental cost and benefits may result in fewer authorizations and longer studies but it should lead to more and better projects being built.

As the Corps of Engineers prepares projects and programs and presents them to Congress for approval, it is essential that the Corps be able to demonstrate unequivocally that the plans are the result of the best analysis that modern engineering, economics, and environmental science can provide. This Committee can play a key role in assisting the Corps in improving its planning and methods of analysis to achieve excellence in this effort. The planning process starts with the Principles and Guidelines that underlie this work. President Reagan established the current Principles by Executive Order in 1983, replacing the 1980 Principles and Standards. These Principles and Guidelines have served the Nation well. Using them, the Corps was able to evolve from unilateral initiatives and projects, to joint undertakings and partnering with non-Federal entities as spelled out in the Water Resources Development Act of 1986. The Corps was also able to refocus its Civil Works mission from mainly commercial navigation and flood control to an increasing emphasis on environmental restoration and stewardship now 19 percent of the Civil Works budget. Indeed, because the Principles and Guidelines mandates that projects contribute to economic development while protecting the environment, they have provided a key impetus to this change in focus. Under the Principles and Guidelines, the entire Corps project development process is subject to an extremely high level of executive branch and congressional oversight. Through the annual appropriations process, the Administration and the Congress have the opportunity to review projects at every stage of development. Indeed, the Corps only constructs 16 of 100 potential water resource projects that begin the project development process; that is testament to the efficacy of the oversight. The Principles are intended to ensure proper, consistent planning by Federal agencies in water resource studies. They state: "[T]he Federal objective of water and related land resources planning is to contribute to national economic development consistent with protecting the nation's environment, pursuant to national environmental statutes, applicable executive orders and other Federal planning requirements." This is actually a practical definition of sustainable development and I do not believe it needs to change.

III. MONETIZING ENVIRONMENTAL BENEFITS

The Principles and Guidelines do allow some flexibility. Although plans that maximize economic benefits generally have been the focus, the Principles and Guidelines does not require an agency to select a course of action based on that criterion alone. The Secretary of the Army may also grant exceptions to the economic criterion under specific circumstances. The Corps also develops plans that maximize environmental restoration, as well as plans with "combined National Economic Development/National Economic Restoration" benefits. It is with these combined NED/NER plans that the economics get complex. It's one thing to calculate, forecast, and say "This project will prevent X dollars in flood damage in the event of a storm of size

early in the Reagan Administration, especially from Secretary Watt. Had Mr. Carter not issued the 1980 version as regulations, we might never have changed them in 1983.

Y,” or “This navigation project will save shippers X dollars over the cost of shipping by another mode, and these savings will be passed on to consumers.” It’s entirely more complicated to calculate and forecast “passive value” and say, “It’s worth X dollars to protect or restore Y acres of habitat.” Therein lies a major opportunity for improvement. The Corps is attempting to determine, and develop tools to evaluate, “willingness to pay” or benefit-cost ratios for projects where there are no direct monetary benefits.³ Some environmental economists have argued that “an intact ecosystem is worth 82 percent more, on average, than the same parcel clear-cut, drained, paved or otherwise developed in a non-sustainable way.” Such an economic valuation could seriously affect the BCR of Corps projects. Recent environmental restoration efforts reinforce this idea. In 2002, the Corps has recently estimated, albeit roughly, that it would cost \$10,000 an acre to create the remaining 130,000 acres of Missouri River Fish and Wildlife Mitigation authorized by the Congress. That includes about \$1,500 per acre for acquisition of agricultural land and the balance to convert that land back into natural wetlands or riparian habitat. If that is what we are willing to pay, does that not argue that we now value a natural ecosystem at least six times the value of agricultural land?

Finally, and not to belabor the point on monetizing benefits, but Civil Works projects often do not take credit for reducing the risk of environmental or health damages. The EPA often justifies actions on the basis of lives saved. I believe they recently have even claimed \$4.8 million for each “statistical life” that a regulation may save, for example by toughening standards for pollutants. Should not the Corps’ benefit-cost analysis do the same? When an inland navigation project keeps thousands of trucks off the road, statistically there are fewer accidents and fewer deaths annually. This very real benefit should accrue to a navigation project.

IV. WATERSHED APPROACH

Another significant area to address is how projects affect other water resources needs and other projects within a watershed. As I said earlier, the Corps is uniquely able to carry out public works projects that adopt a regional perspective. Often, demands to balance these needs will require integration of multiple Corps programs and projects with each other and with the programs and activities of states and other agencies. In this regard, I would like to point out the excellent work of the Association of State Floodplain Managers. The Association espouses some common sense ideas about floodplain management. One that appeals to me is the notion that no floodplain development should be allowed to cause an adverse effect on someone else’s property in the floodplain. In other words, we should preclude the transfer of flooding problems from one property to another property or community. That simple idea is what watershed planning is about, and it ought to be a part of the Principles and Guidelines. It also requires someone to referee disputes between upstream and downstream interests, for example. Who could do this better than the Corps?

To institute a true watershed approach for planning and execution, the Corps may need authorization from Congress. Existing laws and policies encourage an individual project focus, and geographically limited projects, in which sponsors share the cost of the study. The current approach limits the Corps’ ability to look comprehensively, and it fosters an atmosphere that may lead to inter-basin disputes. It also increases the risk that projects that solve one problem may inadvertently create others, even though the Principles and Guidelines and Corps guidance say the agency is supposed to avoid this. Too frequently the economic solution is selected over the environmental, when, in fact, an option must exist to have both. I believe the future is to look at watersheds first; then design projects consistent with the more comprehensive approach. This comprehensive approach is a reform, but a reform of the national water policy and the Principles and Guidelines to better meet the future environmental and economic needs of the Nation.

V. REVISING THE PRINCIPLES AND GUIDELINES

At present there is no statutory requirement to revise the Principles and Guidelines. Under the current Principles and Guidelines, the Nation has developed good projects that promote economic development and benefit the environment, such as the Comprehensive Everglades Restoration Project, the Upper Saint John’s River

³The benefit-cost ratio (BCR) is not the same as a benefit-cost analysis (BCA). The BCR is a first rough estimate of the desirability of a project. One divides the estimated benefits (in dollars) of a project by its total costs to get the ratio. A positive ratio of 1.5-to-1 or greater is frequently deemed acceptable. Willingness-to-pay (WTP) estimates are an attempt to establish the hypothetical dollar value for environmental amenities that have no readily identifiable market, i.e., clean air or species conservation.

Basin Flood Control Project, and the Houston Ship Channel deepening. The Army and the Corps can work with other agencies to improve the way the Corps does water resources planning under the current Principles and Guidelines. Updating some Corps regulations alone might improve the process. However, while the Principles are acceptable as they are, I believe that revising the Guidelines in the Principles and Guidelines could lead to improvements. Fine-tuning the Principles and Guidelines could include revisions that would:

- Update the “willingness-to-pay” methods used to calculate such nonmonetized existence values as recreation and environmental benefits.
- Specify more clearly the acceptable assumptions and conditions for not undertaking the project. The Corps’ current benefit-cost analysis compares the benefit of doing “a” project against the cost of not doing it. There is too much ambiguity in the analysis of the cost of not doing the project, and the Corps needs to deal with that ambiguity.
- Formalize the methods for scenario-based planning (charrettes), which the Corps has used successfully on its Upper Mississippi Navigation Study.
- Update the assumptions used to calculate nonstructural flood-damage-reduction benefits. The Corps has pursued nonstructural flood control for decades, but it needs better economic tools to monetize the benefits of this practice.
- Reconsider the use (or nonuse) of Regional Economic Development benefits.
- Develop improved methods for risk and uncertainty analyses.
- Redirect the planning process to provide more benefit to the environment, perhaps by providing better guidance on mitigation.
- Accelerate the use of collaborative planning processes.
- Jump-start the use of other proven planning methods.
- Apply the Principles and Guidelines to the water planning of other Federal agencies, such as the Federal Emergency Management Agency, the Department of the Interior, and the Environmental Protection Agency.

I think you can see that a revised Principles and Guidelines can add value to the Corps’ planning process.

VI. OTHER CORPS ISSUES

Two other basic issues Congress and the Corps need to address are reducing the backlog of “authorized” projects and improving the Corps’ internal processes.

A. Project Backlogs

Let me first address the backlog. The Corps has about \$5 billion worth of inactive projects, whose designs probably won’t solve the original problems they were intended to solve or for which there is no longer support. The creation of this “historical” backlog began somewhat accidentally. After authorizing no new projects for 16 years, Congress in 1986 included well over 200 projects in the Water Resources Development Act that year. Considerable time may elapse between when a problem is identified and studied, and when the project to address the problem is constructed. During that time lapse there may be scientific progress that could better address the problem, or there may even be shifts in public policy. Then there are projects that could have direct and immediate positive impacts, solve real problems, but are controversial for any variety of reasons. Congress authorized most of these inactive projects years ago, but the Corps never built them. Some of these show up on the “hit lists” of critics, and sometimes the critics are right. The challenge is how to determine whether or not we will still pursue these projects. Clearly, the congressional sponsors of these projects could withdraw their support or even introduce language to de-authorize them in a future WRDA. Sometimes this is too difficult politically. It would be helpful for an interagency task force to take a fresh look at them, perhaps in the same way the BRAC Committees decide on which military installations to close.

B. Internal Processes

As for the Corps’ internal processes, at your direction in the Water Resources Development Act of 2000, senior officials recently have focused on planning and review capability, reemphasizing such basics as environmental science, economics, public involvement, and internal review. The Corps also reviewed the best way to consolidate its planning and review capability for high-priority, low-volume activities, so that it could assign the best people to the most complex projects. One congressional requirement was an independent review by the National Academy of Sciences. The first part of the review was completed in 2002, and we understand that the remainder will be released within a few weeks. In this regard, I believe that General Flow-ers and his staff have made excellent progress, and I commend his good work to this Committee.

The 2002 study findings supported independent review for major Corps projects. The Corps has been implementing this recommendation. By the time I left, the Corps' preference was to incorporate it in the Chief of Engineers Report process so as not to increase the time from initiation of a study to authorization of construction. One possibility might be the kind of review provided by the old Board of Engineers for Rivers and Harbors,⁴ but with external technical experts as well as Corps division commanders and employees. In the interim the Corps is using various new forms of review, internal and external, to improve and validate their studies and projects. The Corps is taking advantage of its value engineering expertise, its cross-district review capability, and outside experts to evaluate and validate its findings. Today I do not believe that there are any other projects, private or public, that receive the degree of review of Army Civil Works projects.

VII. CONCLUSION

Finally, I would submit that we must address the question of how the Corps goes about developing and recommending projects on a higher strategic plane: Where is our national policy for water resources heading next? Where should the Corps give priority to development of water resources for social and economic benefit and where should we restore them to their natural state? There will and must be times when the Nation must choose one over the other. As science and engineering evolve, we can find more balance between these options, and working together, make the right choices.

We must also ask what water resource investments does the Nation most need to make now. To what extent should these be a Federal responsibility? To what extent should the Corps have this responsibility? Which investments should we defer until later? What can we do without? Should we continue all ongoing construction projects? Can we afford to build them all simultaneously? All these questions will require answers in the coming months and years.

Let me emphasize again: The Army Corps of Engineers, more than any other Agency, is uniquely qualified to evaluate multiple and competing options objectively and assess the best course of action.

In conclusion, I can offer these three points as a personal vision for the future of the Corps of Engineers:

1. The Army Corps of Engineers must be the nation's water resources leader for sustainable watershed development and environmental restoration. The Corps' effort in stopping wetland loss and restoring riparian habitat and wetlands in the past decade is a dramatic example of what they can do when they get the mission. Congress should reaffirm this role in the next WRDA.

2. The Corps is the world's pre-eminent public construction agency. No other agency can take better care of our nation's water resource infrastructure than it does. The Corps is uniquely qualified to lead the protection and development of our water resources based on its 200+ years of experience on our rivers, ports and coastlines.

3. The Army Civil Works program must focus on local concerns while coordinating national resources in an open, collaborative decisionmaking process. The Corps cannot take sides or dictate solutions. Instead the goal is to build consensus. Based on my experience that is how the Corps is working today.

To the degree that this committee can help improve planning and methods of analysis, you will do the Corps and the Nation a great service.

Thank you for inviting me to be with you today. I would be happy to answer any questions you may have.

RESPONSES BY DOMINIC IZZO TO ADDITIONAL QUESTIONS FROM SENATOR INHOFE

Question 1. Some have argued that the civil works program belongs in the DOT or another civilian agency. Do you believe that the corps has an essential mission in the area of national security? And would this mission be compromised by making it a civilian agency?

Response. The U.S. Army Corps of Engineers' Civil Works program has an essential national security mission supplementing the uniformed services in times of war. The Army Civil Works program employs about 25,000 civilian employees, funded during peacetime by non-DOD appropriations. This represents a ready pool of skilled, experienced government employees that can be used in support of the Armed Forces in times of crisis, as in Afghanistan and Iraq today. The only alter-

⁴This Board was established in 1902 and continued in operation until the early 1990's, when Congress disbanded it.

native to this would be more uniformed military engineers because most of the functions that these Corps of Engineers employees are called on to perform are inherently governmental. Detailed knowledge of Army procedures and familiarity with the organization is required.

In my opinion, this National Security mission would be seriously compromised by giving the Civil Works mission to a civilian agency like the Department of Transportation. First of all, there would be an inevitable blurring of the priorities of the peacetime and wartime mission. I don't think that is the case now. Second, the necessary coordination to ensure that the Civil Works staff can seamlessly blend into the military organization would be almost impossible to achieve. We know the current system works when we need it to. It can also be argued that other Agencies that have tried to perform the engineering and construction mission, USAID for example, have failed to meet the same standards of the Corps of Engineers. In fact, the Committee may want to pursue a comparison of the effectiveness of the Corps of Engineers with USAID and CPA efforts in Iraq as part of a Lessons Learned.

A more important issue is whether we can improve the current Army Civil Works structure to improve both the National Security Mission and the peacetime mission. I have serious concerns that over the many years of peace that we have enjoyed, the organization of the Corps has been unnecessarily weakened in two key areas.

First, Army Engineer Officers are not required to be professional engineers or even to have an engineering degree. The argument is that they are managers and leaders, not technical people. This is a grave error in my view, both for the national security mission and the Civil Works mission.

Second, our policies have forced the Corps to focus on non-core tasks. Hence, an analysis of the skills of the 25,000 employees in the Civil Works program will show that there are over a thousand biologists, hundreds of economists, and other non-engineering skills. This, in my opinion, is the result of Congress' asking the Corps to answer questions about economic and environmental issues that have nothing to do with the basic engineering and construction mission of the Corps and have everything to do with the political process in Washington. Whether this is necessary or not bears further study.

General Gerry Galloway, formerly Dean of the Military Academy and a District Engineer, wrote an excellent paper some years ago elaborating on this subject.¹

Question 2. In your testimony, you emphasize a need to improve the uncertainty analysis in the development of projects. Knowing that one of the most common complaints from Local Sponsors and Congress is the length of time it takes to plan and develop a Corps of Engineers project, what impact would changing the uncertainty analysis have on the process and would this increased time be worthwhile? Also, is the current uncertainty or level of risk allowing less beneficial or even the wrong projects to be supported in the current process?

Response. Uncertainty analysis should not delay project development nor should it cost more money. Uncertainty analysis should be included as an integral part of any study being conducted. Procedures should be changed to require that every report include an uncertainty analysis in a standard format so that decisionmakers can see how good the information is and make comparisons on the quality of the information behind different projects.

Question 3. In your testimony you highlight the low number of potential projects that actually make it to construction. However, many of these projects are still carried on the Corps backlog. You recommend an interagency task force to review the backlog and make recommendations. Would you please elaborate on this?

Response. When I reviewed the Civil Works project backlog in 2001 and 2002, it was clear that many of the projects would never be funded for construction. However, the Corps continued to keep these projects active because it was concerned about Members of Congress who continued to sponsor the projects even though there was no chance of ever getting funds appropriated. The congressional sponsors, in turn, were under political pressure to pursue these projects for their constituencies. The situation is directly analogous to the political problems that ensue when DOD tries to close a military base. The BRAC process seems to have worked well in identifying bases for closure. It is my belief that a similar process for de-authorizing Civil Works projects would work well.

Question 4. In your testimony you highlight how other Federal agencies monetize environmental or health benefits as a potential way to calculate benefits associated with removing trucks from roads and transporting the same cargo on inland waterways. Do you believe that there can be a meaningful economic value assigned to en-

¹Gerald E. Galloway, Civil Works in the Army? (1974) (copy on file with ASCE).

vironmental costs and benefits and who should be involved in developing those guidelines?

Response. I do believe that a meaningful economic value can be assigned to environmental costs and benefits and that this is the best way of using our free market to enhance the environment. I also happen to believe that the process of agreeing these guidelines can provide a mechanism for achieving a national consensus on how to reconcile the differences between necessary economic development and environmental protection. I would suggest that the Chairman of the President's Council on Environmental Quality (CEQ) and the Chairman of the President's Council of Economic Advisers (CEA) jointly chair a Task Force to establish these guidelines. CEQ and CEA should organize a Task Force with key players in this debate, including EPA and the Department of the Interior, but also other players such as Commerce and Energy. They should certainly entertain input from industry and the environmental community, as well as state and local governments.

Question 5. The Corps does \$500 million worth of dredging annually. Most of the dredged material is disposed of offshore because their mandate is to manage the material in the least costly way. Would changes to Corps policy allow us to use this material in a more environmentally beneficial way?

Response. This is an environmental enhancement to Civil Works dredging programs that the Corps has been trying to implement for some time. The problem has more to do with the Corps' budget than internal Corps' policy. Everyone agrees to the beneficial use of dredged material in principle. However, it generally costs more money. The Corps has been reluctant to move forward aggressively on its own because of a concern that the requirement will be to implement this policy change without a corresponding increase in the budget. The only solution within the Civil Works Program then would be to dredge less.

A possible solution would be for the local sponsors or other agencies, like the Department of Interior or EPA, to provide the increase in funds for this environmental enhancement to the Civil Works dredging program. While the Corps has used some funds to encourage the program, and some local sponsors have come forward to help, not enough has been done.

Question 6. You emphasize a need for the Corps to focus on local concerns as well as national interests through consensus building. Is the Corps capable of continuing this evolution and what tools do they need to continue this evolution?

Response. In my opinion, the Corps does a good job of consensus-building now for individual issues or projects. It needs to continue the good things in terms of taking in public comments, holding public meetings, and basically having a transparent decisionmaking process. However, the Corps does a poor job of publicizing the decisions and successes of the Civil Works program and educating the public and local governments on the program. There appears to be a reluctance to reach out with information unless it is part of a prescribed project procedure. While the Corps Web site helps alleviate this somewhat, it needs to do more. I believe it would be helpful if Congress were to mandate, outside the normal project development process, that the Corps report to the American people annually on its stewardship of our Water Resources. This should be more than a paper to Congress. I would suggest an annual video report that can be broadcast on C-SPAN and through other media.

RESPONSE BY DOMINIC IZZO TO ADDITIONAL QUESTION FROM SENATOR JEFFORDS

Question 1. In your testimony, you mentioned the importance of environmental protection in Corps projects. Can you comment on the Society's views on the Corps mission of ecosystem restoration? And what would the effects be if the Corps no longer accepted ecosystem restoration as a key mission?

Response. First of all, environmental protection is a part of every large civil engineering project undertaken today. Even in Iraq and Afghanistan, where priorities may be different, environmental protection is still a consideration.

Large-scale ecosystem restoration almost always entails large civil engineering works. For example, the great majority of actual work done in the Comprehensive Everglades Restoration Program (CERP) will be civil engineering. Building channels and levees to ensure a water supply to revitalize the Everglades is not very different from building channels and levees for flood control. This is not to imply that the biological and ecological sciences are not important or key players; they are. What it does say is that the actual work is traditional civil engineering. Moreover, it is worth noting that environmental engineering is an offshoot of classical civil engineering. The bottom line is that ecosystem restoration is a natural mission for the Army Civil Works Program.

If the Corps no longer accepted ecosystem restoration as a key mission, other agencies would have to do more. Such a situation might well argue for EPA or the Department of the Interior to develop their own "ecosystem restoration engineering divisions." I do not think this would be wise or efficient. Certainly, EPA and Interior should establish the biological and ecological criteria for success in ecosystem restoration projects; that's what they do the best. However, once the biologists and ecologists have established what the end-state should be, it seems most efficient to let engineering and construction specialists execute the project.

STATEMENT OF GREGORY A. ZLOTNICK, BOARD MEMBER,
SANTA CLARA VALLEY WATER DISTRICT

Good afternoon, Mr. Chairman, members of the Subcommittee and staff. My name is Greg Zlotnick and I am a member of the Board of Directors of the Santa Clara Valley Water District. I want to thank you for holding this hearing on the role for the U.S. Army Corps of Engineers in meeting the nation's water resources needs.

Mr. Chairman, the agency that would become the Santa Clara Valley Water District was formed in 1929. At that time, the population of Santa Clara County was 145,000 and agriculture was the leading industry in what was known as "the valley of hearts delight." The area suffered from repeated flooding of the Guadalupe and other rivers and streams in the region. Today, the population of the county is 1.7 million and the District manages flood protection and water supply resources for the entire County, including the center of high technology innovation—the fabled Silicon Valley. And although many people are now protected from flooding, the Guadalupe and other rivers and streams still have the potential to cause millions of dollars in flood related damages.

Over the past 7 years, the District has gone through an evolution from a dual purpose flood protection and water supply agency to a progressive, proactive, multi-purpose focused organization. This change has come about by policy changes by the District Board of Directors, enabling legislation at the state level, passage of a tax measure by voters that promised Clean, Safe Creeks and Natural Flood Protection, International Standards Organization certification for Capital, Watershed, and Environmental Management Programs, and pursuit of "Green Business" certification. We see the need for change and evolution of the Corps as similar to the District's; we have made a lot of progress but still have a long way to go.

We have a long history working with the Corps of Engineers and the Bureau of Reclamation to find solutions to our water resources problems. Even though our agency has significant capabilities in water resources development, our varied needs and the costs of projects, mitigation, and appropriate public processes far outstrip our ability to pay for them on our own. Therefore, on those projects critical to maintaining the economic vitality of our region, an engine of the national economy, we turn to the Corps as a partner. We have been pleased in our working relationship, providing multi-purpose projects that my constituents demand, and which reflect the leading edge of a national trend. The District was local sponsor to a \$62 million Corps flood protection on Coyote Creek that now prevents an estimated \$250 million in flood damages during a 100-year event. Currently, we are the local sponsor or a participant in ten active and on-going Corps of Engineers projects in every stage of the development process, including the completion of the flood protection elements of our ground-breaking \$250 million Guadalupe River Project. We believe that we now have an extremely productive relationship with the Corps, and that we and the Corps are partners in the truest sense of the word.

However, getting to this point in our relationship with the Corps has not been easy, and we have to work hard to maintain the partnership, even if that means that we sometimes have to tell the Corps "no" when they make a proposal that we don't think is in the best interests of our citizens. Our area around the San Francisco Bay is certainly one of the most environmentally conscious regions of the country, and the old style Corps of Engineers flood control consisting of concrete flood walls through the middle of town, although originally offered, just won't work in our area. To its credit, the Corps has shown responsiveness and creativity in working with us to develop alternatives more consistent with community expectations.

As I indicated earlier, a primary source of flooding in our area has been the Guadalupe River, which runs through downtown San Jose and the heart of the Silicon Valley. Protecting our citizens and businesses from that flooding has been a focus of our agency, and I'm happy to report that the flood protection features of the portion of the project that runs through downtown San Jose will be completed later this year. And while flood protection has been a key focus, what we are most proud of is that, working with the Corps, we have developed a number of projects which

adopt a watershed approach that balances flood protection needs with water quality, habitat enhancement and restoration, and recreational opportunities. In fact, the District feels so strongly about environmental restoration, that in 2001 the Water District sought and sponsored state legislation that added environmental stewardship as an explicit third chartered mission, along with water supply and flood protection to its authorities.

This multi-purpose project, known as the Guadalupe River Project, is a great example of what can happen when the Corps of Engineers and local interests work together as true partners, and this project has become a model for what the Corps hopes to be able to achieve throughout the country. The best example of this partnership occurred in 1996, when the project had already been under construction for 4 years. At that point, construction was stopped due to concerns regarding the adequacy of mitigation, new listing of endangered species, and the receipt of a notice of intent to sue from four environmental organizations. In the past, I believe that these circumstances could have resulted in the termination of the project. Instead, our District initiated a collaborative process with the Corps, the City, Federal and state resource agencies, and the environmental community to resolve the mitigation disputes. The result was a modified project allowing for a bypass channel and the inclusion of shaded riverine habitat to cool the river for the listed species and to preserve a significant riverine corridor. The modified project was approved in November of 2001. In a June 24, 2002, editorial the San Jose Mercury News said, "At a time when government-bashing is an overplayed sport, the Guadalupe flood-control, river-restoration project is a great example of how government can get it right."

The not so good news is that it has taken a very long time for us to get to this point. The reconnaissance report for this project was initiated in 1975, almost 30 years ago. It took 10 years for just the feasibility study to be completed. In the meantime, our citizens continued to be subject to the devastating effects of flooding, and costs for us and the Federal taxpayers have increased significantly. It is also true, however, that because of the time it takes for a project to move through the Corps process, and in this case, the change in conditions which forced a redesign of the project, we have a much better project than we would otherwise have had. So, I believe that the key issue that the Corps, and we, as local sponsors, must address is how can we move projects through the process faster, but still get them "right" the first time.

Another more recent example of how we as partners can overcome historic differences to bring forward innovative, environmentally sensitive projects through positive experience and developing flexible, new arrangements is occurring now in our area around the San Francisco Bay. In the 1980's, the Corps conducted a study of the need for flood protection in the low-lying areas around the southern end of San Francisco Bay. At that time, the Corps concluded that the potential for flooding damages was low and, therefore, the study was suspended. Since the completion of that study, the area, particularly Silicon Valley, has undergone significant development and in July of 2002, the Corps was authorized to review the previous study to determine the Federal interest in tidal and fluvial flooding flood damage reduction and environmental restoration in Santa Clara, San Mateo and Alameda Counties. The fiscal year 2004 Energy and Water Development Appropriations Act included \$100,000 for the Corps to initiate the reconnaissance phase of that study, the South San Francisco Bay Shoreline Study.

One of the reasons why the earlier Corps study ended with a "no action" recommendation was that the existing levees associated with maintenance of the active salt ponds owned by the Cargill Company, while not designed for flood protection, did provide a measure of flood protection. In March of 2003, however, the salt ponds were acquired by the State of California, Federal Government, and private foundations with the goal of restoring them to wetlands. This restoration effort, if flood protection activities are not incorporated simultaneously, would have a significant impact on the threat of tidal flooding problems faced by residents of the counties surrounding the bay. Also at risk is the golden triangle of Silicon Valley in north San Jose, an area that lies below sea level.

Based on our positive experiences working with the Corps of Engineers to develop flood protection measures that also included significant environmental restoration components, we saw this situation as an opportunity to develop an integrated, multi-objective watershed project, using the authority of the South San Francisco Bay Shoreline Study, that would address both tidal flood protection, which was our primary interest, and restoration of the salt ponds, as well as public access, and recreation opportunities for the broader interests in the state and which are consistent with our watershed management approach. The challenge was how to get the Federal and state agencies involved in the flood protection and wetlands restoration projects working together. This challenge was all the more difficult because,

quite frankly, the agency the state placed in charge of the salt ponds restoration effort, initially wanted nothing to do with the Corps of Engineers. Their view of the Corps was of the “old” Corps—an agency that did what it wanted, not what the community wanted—to the detriment of the environment. We knew, however, that through our positive experience that the Corps did not have to operate that way and we worked closely with the state agency over a number of years in collaboration to educate, advise and show the agency our Corps-partnered initiatives.

Recently, we helped arrange a meeting between officials of the agency and the Corps here in Washington. At the meeting, the agency explained its vision of how the project should proceed, which was that it, my agency, and other local interests would lead the study effort, with technical input from the Corps, rather than the traditional model of the Corps conducting the study with input from the community. Perhaps to the state agency’s surprise, the Corps embraced this concept, and we are now working with the agency and this Committee to develop the necessary legislation to make this concept work. I believe that this is a good example of how adding flexibility to the Corps study process can prove beneficial to all parties. Perhaps if we make the necessary improvements to the Corps system as we outline here and below, these type of flexible and expertise-based arrangements can be handled seamlessly through more tailored feasibility study agreements.

Some recent developments have helped us move in the direction of timely progress and getting it “right” the first time. The change to a streamlined reconnaissance study process a few years ago to quickly determine if there is a Federal interest in solving a problem has been a big help. Another more significant development has been the gradual but accelerating cultural change that the Corps is undergoing where local sponsors are now partners, deserving of service and collaboration, rather than merely the local receptacle of Corps “wisdom” along the lines of “we’re from the government and we’re here to help.” This culture change is still evolving and the message doesn’t always get down to the District level, but it is critical, in our view, to a successful and revitalized civil works program as the Nation struggles to maintain aging water resource infrastructure while meeting water supply, water quality, and flood management challenges of the future. While you can’t legislate a change in attitude, there are things you can do to encourage it. The partnering provisions contained in H.R. 2557, the House-passed Water Resources Development Act of 2003, are a step in the right direction.

From the perspective of a local sponsor, what can be extremely time-consuming and frustrating is having to deal with a take it or leave it contract for construction, that is the project cooperation agreement, which dictates the partners’ roles. Typically, it must then be moved up the Corps’ chain of command only to be reviewed yet again at the Assistant Secretary of the Army’s office, where the lawyers review what has already been reviewed many times below them producing delay and inefficiencies. In our view, the partnership must start at the field level and the Corps’ district commanders must be empowered to honor and use the abilities of its local partners. In fact, this true partnering effort should start at the feasibility cost sharing agreement stage and flow through design and the project cooperation agreement level. A Corps district commander should, under general principles from Headquarters, be able to tailor each agreement, be that feasibility study or partnering agreement, to the capabilities and needs of the sponsor. If, for example, the sponsor has the capability and experience to lead the feasibility study and this provides efficiencies to the system, both partners, and for the project, then they should be allowed to proceed without the need for special legislation or additional agreements. Further, if, for example, due to local conditions, perhaps a significant flood or environmental threat, the experienced and motivated local sponsor must proceed with advance construction work to provide early benefits and this is in the Federal interest to reduce the threat and reduce damages and total project costs, then the sponsor should be able to proceed without developing additional agreements which can drag on for months and sometimes years.

The partnering principle could also be expanded to include the process for selecting a recommended project. Currently, the Corps recommends the NED plan. If the community prefers a different plan, it must pay any cost differential between the NED plan and that plan, even if the community’s plan is also economically justified. Because the taxpayer’s money is involved, it is important that the Corps continue to examine the benefits and costs of each plan being considered. However, the Corps should be given the flexibility to deviate from the NED plan in order to meet the real needs of the community as long as the solution preferred by the community is also economically justified.

Another possibility along these lines is to allow a local sponsor to carry out the necessary work of a reconnaissance level investigation, with the Corps monitoring rather than doing the work, that would then put the Corps in a position to make

a determination of whether there's a Federal interest in moving forward with a project or not, but not having to hold up that preliminary determination to the Congress authorizing a potential new start. Congress would still have to authorize the new start, but it would do so knowing whether a Federal interest had been determined or not. The traditional route of having the Federal Government pay for the reconnaissance investigation after getting a new start authorization for it would still be an option, but for agencies with the wherewithal and a local sense of urgency, this would allow the process to start in the Congress one step further down the path to a project.

It must be noted that communities, ours included, are taking the initiative in difficult budget times to raise revenue dedicated to water resources infrastructure as well as environmental restoration and recreation. In our case, our community strongly signaled their trust in the Water District as its watershed steward and flood manager in November 2000, when more than two-thirds of the county's voters agreed to tax themselves to the tune of \$25 million a year to provide funding to the Water District for a 15-year effort to reduce flood hazards, as well as protect and restore hundreds of miles of waterways in Santa Clara County. Over the course of the Clean, Safe Creeks and Natural Flood Protection Program, the District will construct nine new flood protection projects to safeguard 13,600 homes, 1,040 businesses and 43 schools and public facilities in the county from flooding. Over half of the flood protection projects funded by the Program are Corps partnered projects.

In addition to flood protection, the Clean, Safe Creeks program is also protecting, enhancing and restoring creek ecosystems, improving water quality, helping keep neighborhood creeks free from trash and developing 70 miles of trails, parks and open space along the creeks in the county. The second annual report by an external and independent monitoring committee has, as in its first year, verified progress to date and provides assurance to the community the District is fulfilling its promises.

Another recommendation for efficiency in the Corps system flows from the idea of building accountability into the feasibility and design stages. From a local sponsor's perspective, it is not acceptable to watch years go by on a study with no discernable progress toward solving the problem already identified as in the Federal interest to resolve, and no accountability. Feasibility studies, as well as detailed design and preconstruction activities should be completed on a date certain basis, with past due efforts and all costs associated with and attributable to Federal delay shifting to 100 percent Federal responsibility.

Mr. Chairman, the Santa Clara Valley Water District has a long and storied history with the Corps, not always smooth, but now very positive, progressive and always improving to meet the needs of the community. As the Committee considers how to improve the Corps' process and reaffirm Congress' commitment to a stronger and more efficient program, we hope you will consider the recommendations identified here for true partnering, empowering the field officers and local governments to build flexibility and innovation into the system, as well as allowing for local dollars to flow early to save lives, economically develop our communities and allow sponsors and the Corps to meet the challenge most efficiently.

Thank you, Mr. Chairman, for your time and consideration and I stand ready to answer any questions you may have.

RESPONSES BY GREGORY A. ZLOTNICK TO ADDITIONAL
QUESTIONS FROM SENATOR INHOFE

Question 1. In your opinion, can the Corps change its way of doing business to accept efficiencies and innovations or is the Corps and its program incapable of change.

Response. I believe that the Corps can change its way of doing business because it has, in fact, done so in certain circumstances. However, at least until this point, I do not believe that the Corps has taken all the steps necessary for it to become the efficient and innovative agency that it needs to be during these times of scarce resources at the Federal, state, and local levels. The "old" model for the way the Corps did, and unfortunately too often still does, its business is one where the Corps presents to local interests, in a take it or leave it fashion, a solution to a water resources problem without any meaningful input from the community. The solution developed by the Corps would probably solve the problem, but it might not even remotely be what the community wants or can afford. The only thing the Corps asked of the local sponsor was that it provide its share of the project costs. That is hardly a model that will bring about efficiencies and innovation. I applaud the steps the Corps has taken on a national level to try to change its ways and be more responsive to the needs of local sponsors. Even something as simple as referring to spon-

sors as “partners” rather than “customers” is a step in the right direction. I don’t think, however, that these changes have become ingrained in the culture of the Corps the way they need to be. Our experience is that the only way to get to Corps to move away from the old model that I described above is for the local sponsor to be very aggressive and insist that the Corps really listen to strategies developed by the community for solving the problem. If the Corps refuses to listen, the sponsor then has to be willing to “fire” the Corps. That will get their attention, because without sponsors there are no projects and without projects there is no Corps of Engineers. Unfortunately, not all sponsors have the experience and the capabilities needed to force the Corps to be a real partner. They literally do have to “take it or leave it”. While real change in the way the Corps does business has to come from within, I do think there are things the Congress can do to help bring this change about. By moving decisionmaking within the Corps down the chain of command, you can improve the chances that decisions will more reflect the desires of the community. You can also enact legislation that would empower local sponsors to take a more active role in the actual planning and design of projects. These types of changes, I believe, will result in a much more efficient Civil Works program and one in which innovative solutions to problems are more likely to be identified.

For the Committee’s consideration, I am including a package of process improvements for the Corps’ program for possible inclusion in the Water Resources Development Act. These refinements are based on the District’s long and positive experience with the Corps and we believe will improve the partnership, the projects and will reduce project costs.

Question 2. How would a partnering agreement work to the benefit of the Federal Government and the local communities? Will this undermine the national program?

Response. The major benefits that would result from true partnering agreements between the Corps of Engineers and local sponsors are that Federal funds will be utilized more efficiently, costs to the Federal Government and local communities would be reduced, and, perhaps most importantly, the projects that would result from those partnering agreements would be ones that meet all the needs of the community. In a true partnering arrangement, the Corps would make full use of the capabilities of the local sponsor at all stages of project development. If the Corps really knows what the desires of the sponsor are, it won’t waste time and money going down roads that are dead ends. On one of our projects, the Corps was prepared to recommend 50-year level of flood protection for an urban area. That was nothing more than a pure waste of time because with 50-year protection, they would have no support in our community for the project and, in fact, there would not have been a project. In true partnering agreements, the Corps would also have the authority to make use of the work performed by the sponsor to reduce the costs of planning, design, and even construction in some circumstances. Obviously, not all sponsors have those capabilities; the Corps must be able to put them to good use.

Rather than undermining the Corps’ national program, I believe that partnering agreements are essential for its continuation. Notwithstanding all of our best intentions and efforts, there will always be a shortage of funds in the Corps’ Civil Works program because the needs are so great. Accordingly, the funds that are available need to be spent more efficiently. And I believe the way for the Corps to be more efficient is for it to make better use of the capabilities of sponsors and avoid wasting money on dead ends like the one I described above.

Question 3. Why do Corps feasibility studies and follow-on pre-construction activities take so long and can accountability be brought to the system?

Response. There are a variety of reasons why feasibility studies and other pre-construction activities take so long. For feasibility studies, I think the primary reason is that there is no real incentive for the Corps to complete them in a timely manner. As you know, local sponsors are required to provide one-half of the cost of the feasibility study. As long as a feasibility study is underway, the local sponsor is paying one-half of the salaries of the Corps planning staff. That is not much of an incentive for the Corps to complete the study. I think that a way to bring more accountability into the feasibility study process is for the non-Federal share of the cost of the study to be limited to the amount set forth in the feasibility study cost sharing agreement except for additions required by changes in Federal law or requested by the sponsor. You could also legislatively set a time limit on feasibility studies recognizing that there would need to be exceptions for large, regional projects. Another reason feasibility studies take so long is that there seems to be a desire by the Corps to make them perfect documents. Benefits and costs are studied and restudied down to the last penny when perhaps all that is needed is for the Corps to provide you with a range of benefits and costs so you can make the judgment as to whether or not the project should be authorized for construction. For

pre-construction activities after the feasibility phase, I think the biggest problem is that Corps often, during engineering and design, redoes the things it looks at during the feasibility phase by once again computing benefits and costs. It seems to me that once those things are computed in the feasibility phase and Congress has authorized the project for construction, we should stop the seemingly never ending analysis of benefits and costs.

Question 4. What would independent peer review add to the process? What is the most efficient way to provide for this? Is this peer review process happening already, in another guise?

Response. Contrary to what some may believe, I think there already is independent review of the Corps program. That is one the roles, perhaps the primary role, of the local sponsor. It is our job to keep the Corps focused on the job at hand and to make sure it doesn't gold plate projects, waste money, and do things that would harm the environment in the communities where we live. For the vast majority of the projects the Corps undertakes, I believe that another level of review would do nothing more than slow the process down and add to project costs. There may be some very large and controversial projects where it would be appropriate, but I don't think it would add anything of value to the process for most projects. I have seen proposals that would require independent review for any project costing over \$25 million. I don't think that's a good idea. Our Guadalupe River project has a total cost of about \$234 million. We worked hard with the Corps to make it a project that meets the needs of our community and that also meets all the Corps' requirements. I fail to see how a panel of outside expert reviewers without knowledge of our community would have helped get us a better project.

Question 5. Taxpayers in Santa Clara County decided to tax themselves in order to address the water infrastructure and environmental needs in their area. What is your view for allowing local sponsors to advance both planning and construction activities to reduce project costs and delays? Can you give us an example, in your own agency's experience, how much the government might save?

Response. I do believe there is room in the system for sponsors to advance planning and construction. I am very much aware that the Corps believes that it is important to maintain its capabilities in the areas of planning, design, and construction management and does not want to become an agency that simply writes checks to local sponsors who have done the work themselves. I agree with the Corps in that regard. The Corps is a valuable asset to the Nation and we do not want to see lose its technical capabilities. Having said that, however, I believe the program is large enough that there are cases where the Corps should take advantage of the capabilities of local sponsors to advance work. If we can do a particular task more quickly and/or at less cost than the Corps, we should be permitted to do so. In fact, I believe that all the cost sharing agreements that we, as local sponsors, sign with the Corps of Engineers should permit us to advance work. That would avoid the delays associated with receiving approval for such work from the Secretary of the Army's office or the Congress.

SUMMARY OF WRDA PROCESS REFORMS

FEASIBILITY STUDIES

Amendments to 33 USC 2215 (Sec. 105 of WRDA 1986, as amended)

- change the current Feasibility Cost Sharing Agreement from a "contract" to a "partnering agreement."
- limit the non-Federal share of a feasibility study to 50 percent of the total estimated cost included in the feasibility study partnering agreement plus 50 percent of excess cost over the estimate is the excess results from a change in Federal law or a change in scope requested by the non-Federal sponsor.
- permit the Secretary to use planning and design documents prepared by the non-Federal sponsor as the basis for recommendations to Congress for authorization of a water resources project. The non-Federal sponsor would receive credit for the non-Federal share of the cost of the feasibility study and be reimbursed for the Federal share of the cost of the study.
- authorize the Secretary to credit toward the non-Federal share of the cost of the study work integral to the study performed by the sponsor prior to the date of the feasibility study partnering agreement.

Amendments to 33 USC 2282 (Sec. 905 of WRDA 1986, as amended)

- generally limit the duration of feasibility studies to 2 years, but in no case more than 3 years unless the Secretary makes a determination, in writing, that additional time is required.

WRITTEN AGREEMENTS FOR PROJECTS

Amendments to 42 USC (Sec. 221 of Flood Control Act of 1970, as amended)

- change the current Project Cooperation Agreement from “contract” to a “partnering agreement.”
- include in each partnering agreement a provision permitting the non-Federal sponsor to complete the project or a usable element of the project and allowing the non-Federal sponsor to receive credit and reimbursement for such work, subject to appropriation of funds.

ADOPTION OF RECOMMENDED PLAN

Amendments to Sec. 903 of WRDA 1986

- provide that the Secretary may recommend a plan other than the one which maximizes national economic development (NED) benefits if the NED benefits of the plan recommended exceed its costs.
- provide that the Secretary may include features that do not produce NED benefits that exceed costs if the NED benefits of the project exceed the project costs.

APPROVAL OF REPORTS

- provide for the automatic approval of certain reports by the Assistant Secretary of the Army (Civil Works) unless the Secretary notifies the Congress of his/her disapproval of such reports.

REIMBURSEMENT FOR ENGINEERING, DESIGN, AND CONSTRUCTION BY LOCAL INTERESTS

- provide authority for the Secretary to provide credit for the non-Federal share and reimbursement of the Federal share of planning, engineering, design, and construction of work undertaken by the non-Federal sponsor on authorized flood control and ecosystem restoration projects.

33 USC SEC. 2215

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

CHAPTER 36—WATER RESOURCES DEVELOPMENT

SUBCHAPTER I—COST SHARING

Sec. 2215. Feasibility studies; planning, engineering, and design

(a) Feasibility studies

(1) [Cost sharing] Partnering Agreement

[(A) In general]

The Secretary shall not initiate any feasibility study for a water resources project after November 17, 1986, until the appropriate non-Federal interest[s] [agree, by contract, to contribute 50 percent of the cost of the study] has entered into a written agreement with the Secretary under which each party agrees to carry out its responsibilities and requirements for completing the feasibility study. The agreement shall contain an estimate of the total estimated cost of the feasibility study and a schedule for completion of the study.

(2) Cost Sharing

The non-Federal interest shall be responsible for 50 percent of the total estimated cost of the feasibility study contained in the partnering agreement plus 50 percent of any excess cost over the estimate if the excess results from a change in Federal law or a change in the scope of the study requested by the non-Federal interest. The non-Federal share required under this paragraph may be satisfied by the provision of services, materials, supplies, or other in-kind services necessary to prepare the feasibility report.

(3) Completion of Study by Non-Federal Interests

In carrying out a feasibility study for a water resources development project, the Secretary may utilize planning and design documents prepared by the non-Federal interest as the basis for recommendations to the Congress for authorization of the project. The Secretary shall credit toward the non-Federal share of the cost of the

feasibility study, and reimburse the non-Federal interest for the Federal share of the cost of the study, costs are incurred by the non-Federal interest during the development of the feasibility study if the Secretary determines that the work performed by the non-Federal interest is integral to the feasibility study.

(4) Credit and Reimbursement for Work Performed Prior to Partnering Agreement

The Secretary shall credit toward the non-Federal share of the cost of the feasibility study, and reimburse the non-Federal interest for the Federal share of the cost of the study, costs that are incurred by the non-Federal interests prior to the date of the feasibility study partnering agreement if the Secretary determines that the work performed by the non-Federal interest is integral to the feasibility study.

[(B) Payment of cost share during period of study

During the period of the study, the non-Federal share of the cost of the study payable under subparagraph (A) shall be 50 percent of the sum of—

(i) the cost estimate for the study as contained in the feasibility cost-sharing agreement; and

(ii) any excess of the cost of the study over the cost estimate if the excess results from—

(I) a change in Federal law; or

(II) a change in the scope of the study requested by the non-Federal interests.]

[(C) Payment of cost share on authorization of project or termination of study

(i) Project timely authorized

Except as otherwise agreed to by the Secretary and the non-Federal interests and subject to clause (ii), the non-Federal share of any excess of the cost of the study over the cost estimate (excluding any excess cost described in subparagraph (B)(ii)) shall be payable on the date on which the Secretary and the non-Federal interests enter into an agreement pursuant to section 2211(e) or 2213(j) of this title with respect to the project.

(ii) Project not timely authorized

If the project that is the subject of the study is not authorized by the date that is 5 years after the completion of the final report of the Chief of Engineers concerning the study or the date that is 2 years after the termination of the study, the non-Federal share of any excess of the cost of the study over the cost estimate (excluding any excess cost described in subparagraph (B)(ii)) shall be payable to the United States on that date.]

[(D)](6) Amendment of cost estimate

The cost estimate referred to in subparagraph (a)(1) may be amended only by agreement of the Secretary and the non-Federal interests.

[(E) In-kind contributions

The non-Federal share required under this paragraph may be satisfied by the provision of services, materials, supplies, or other in-kind services necessary to prepare the feasibility report.]

[(2)](5) Applicability

This subsection shall not apply to any water resources study primarily designed for the purposes of navigational improvements in the nature of dams, locks, and channels on the Nation's system of inland waterways.

(b) Planning and engineering

The Secretary shall not initiate any planning or engineering authorized by this Act for a water resources project until appropriate non-Federal interests agree, by contract, to contribute 50 percent of the cost of the planning and engineering during the period of the planning and engineering. Costs of planning and engineering of projects for which non-Federal interests contributed 50 percent of the cost of the feasibility study shall be treated as costs of construction.

(c) Design

Costs of design of a water resources project shall be shared in the same percentage as the purposes of such project.

33 USC SEC. 2282

TITLE 33—NAVIGATION AND NAVIGABLE WATERS

CHAPTER 36—WATER RESOURCES DEVELOPMENT

SUBCHAPTER V—GENERAL PROVISIONS

SEC. 2282. FEASIBILITY REPORTS

(a) Report authority; contents; views of other agencies In the case of any water resources project-related study authorized to be undertaken by the Secretary, the Secretary shall prepare a feasibility report, subject to section 2215 of this title. Such feasibility report shall describe, with reasonable certainty, the economic, environmental, and social benefits and detriments of the recommended plan and alternative plans considered by the Secretary and the engineering features (including hydrologic and geologic information), the public acceptability, and the purposes, scope, and scale of the recommended plan. The feasibility report shall also include the views of other Federal agencies and non-Federal agencies with regard to the recommended plan, a description of a nonstructural alternative to the recommended plan when such plan does not have significant nonstructural features, and a description of the Federal and non-Federal participation in such plan, and shall demonstrate that States, other non-Federal interests, and Federal agencies have been consulted in the development of the recommended plan. This subsection shall not apply to (1) any study with respect to which a report has been submitted to Congress before November 17, 1986, (2) any study for a project, which project is authorized for construction by this Act and is not subject to section 903(b), (3) any study for a project which is authorized under any of the following sections: section 205 of the Flood Control Act of 1948 (33 U.S.C. 701s), section 2 of the Flood Control Act of August 28, 1946 (33 U.S.C. 701r), (FOOTNOTE 1) section 107 of the River and Harbor Act of 1960 (33 U.S.C. 577), section 3 of the Act entitled "An Act authorizing Federal participation in the cost of protecting the shores of publicly owned property", approved August 13, 1946 (33 U.S.C. 426g), and section 111 of the River and Harbor Act of 1968 (33 U.S.C. 426i), and (4) general studies not intended to lead to recommendation of a specific water resources project.

The duration of a feasibility study shall normally be no more than Two years, but in all cases is to be limited to 3 years unless the Secretary makes a determination, in writing, that additional time is required due to the complex, regional nature of the water resources problems being addressed in the study.

(b) Reconnaissance studies

Before initiating any feasibility study under subsection (a) of this section after November 17, 1986, the Secretary shall first perform, at Federal expense, a reconnaissance study of the water resources problem in order to identify potential solutions to such problem in sufficient detail to enable the Secretary to determine whether or not planning to develop a project should proceed to the preparation of a feasibility report. Such reconnaissance study shall include a preliminary analysis of the Federal interest, costs, benefits, and environmental impacts of such project, and an estimate of the costs of preparing the feasibility report. The duration of a reconnaissance study shall normally be no more than twelve months, but in all cases is to be limited to eighteen months.

SEC. 2006. WRITTEN AGREEMENT FOR WATER RESOURCES PROJECTS

(a) PARTNERSHIP AGREEMENTS—Section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b) is amended—

(1) in subsection (a)—

(A) by striking 'under the provisions' and all that follows through 'under any other' and inserting 'under any';

(B) by striking 'to furnish its required cooperation for' and inserting 'under which each party agrees to carry out its responsibilities and requirements for implementation or construction of; and

(C) by inserting after '\$25,000,' the following: 'Such agreement may include a provision for damages in the event of a failure of one or more parties to perform.';

(2) by redesignating subsection (e) as subsection [(f)] (g); and

(3) by inserting after subsection (d) the following:

'(e) LIMITATION—Nothing in subsection (a) shall be construed as limiting the authority of the Secretary to ensure that a agreement under this section meets all

requirements of law and policies of the Secretary in effect on the date of entry into the agreement.

(f) **COMPLETION OF PROJECT BY NON-FEDERAL INTERESTS**—Every agreement entered into pursuant to this section shall include a provision which permits the non-Federal interest to complete the project or a usable element of the project. In such cases, the agreement shall provide that the non-Federal interest shall receive shall receive credit for the non-Federal share of project costs, and be reimbursed for the Federal share of project costs, subject to the appropriation of funds by the Congress.

(b) **LOCAL COOPERATION**—Section 912(b) of the Water Resources Development Act of 1986 (101 Stat. 4190) is amended—

(1) in paragraph (2)—

- (A) by striking ‘shall’ the first place it appears and inserting ‘may’ ; and
- (B) by striking the last sentence; and

(2) in paragraph (4)—

- (A) by inserting after ‘injunction, for’ the following: ‘payment of damages or, for’;
- (B) by striking ‘to collect a civil penalty imposed under this section,’; and
- (C) by striking ‘any civil penalty imposed under this section,’ and inserting ‘any liquidated damages,’.

(c) **APPLICABILITY**—The amendments made by subsections (a) and (b) only apply to partnership agreements entered into after the date of enactment of this Act; except that at the request of a non-Federal interest for a project the district engineer for the district in which the project is located may amend a project partnership agreement entered into on or before such date and under which construction on the project has not been initiated as of such date of enactment for the purpose of incorporating such amendments.

(d) **PARTNERSHIP AND COOPERATIVE ARRANGEMENTS**—

(1) **IN GENERAL**—Agreements entered into under section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5(b)) shall further partnership and cooperative arrangements with non-Federal interests and shall be referred to as ‘partnership agreements’.

(2) **REFERENCES TO COOPERATION AGREEMENTS**—Any reference in a law, regulation, document, or other paper of the United States to a cooperation agreement or project cooperation agreement shall be treated to be a reference to a partnership agreement or a project partnership agreement, respectively.

(3) **REFERENCES TO PARTNERSHIP AGREEMENTS**—Any reference to a partnership agreement or project partnership agreement in this Act (other than this section) shall be treated as a reference to a cooperation agreement or a project cooperation agreement, respectively.

(e) **ENTRY OF AGREEMENT WITH DISTRICT ENGINEER**—After January 1, 2005, the agreement required to be entered into under section 221(a) of the Flood Control Act of 1970 (42 U.S.C. 1962d–5b(a)) shall be entered into with the district engineer for the district in which the project will be carried out, unless, before that date, the Secretary issues policies and guidelines for partnership agreements and delegates to the district engineers, at a minimum—

(1) the authority to approve any policy in a partnership agreement that has appeared in an agreement previously approved by the Secretary;

(2) the authority to approve any policy in a partnership agreement the specific terms of which are dictated by law, or by a final feasibility study, final environmental impact statement, or other final decision document for a water resources development project;

(3) the authority to approve any partnership agreement that complies with the policies and guidelines issued by the Secretary; and

(4) the authority to sign any partnership agreement for any water resources development project unless, within 30 days of the date of authorization of the project, the Secretary notifies the district engineer in which the project will be carried out that the Secretary wishes to retain the prerogative to sign the partnership agreement for that project.

(f) **PUBLIC AVAILABILITY**—Not later than the 120th day following the date of enactment of this Act, the Chief of Engineers shall ensure that each district engineer has made available on the Internet all partnership agreements entered into under section 221 of the Flood Control Act of 1970 (42 U.S.C. 1962d–5(b)) within the preceding 10 years and all partnership agreements for water resources development projects currently being carried out in that district and shall make any part-

nership agreements entered into after such date of enactment available on the Internet within 7 days of the date on which such agreement is entered into.

SECTION 903 OF PL 99-662

(c) [Benefit-Cost Ratio Waiver] Selection of Recommended Plan.—[(1)] In his recommendations for authorization of any project, or separable element, for flood control, the Secretary may——

(1) recommend a plan other than the one which maximizes national economic development benefits if the national economic development benefits of the recommended plan exceed its costs; and

(2) include features that would not produce national economic development benefits greater than cost, if [the non-Federal interests enter into a binding agreement requiring the non-Federal interests to pay during construction of the project or separable element an amount sufficient to make the remaining costs of that project or separable element equal to the estimated value of the national economic development benefits of that project or separable element] the national economic development benefits of the project or separable element exceed the total cost of the project or separable element.

[(2) Non-Federal payments pursuant to paragraph (1) shall be in addition to payments required under section 103 of this Act which are applicable to the remaining costs of the project.]

SEC. XXX

Notwithstanding any other provision of law, the Chief of Engineers shall transmit directly to the Congress any Chief of Engineers Report, General Reevaluation Report, Limited Reevaluation Report, and any other report the Corps of Engineers is required to complete at the direction of the Congress at the same time such documents are transmitted to the office of the Assistant Secretary of the Army (Civil Works) for its review. If the Secretary does not advise the Congress of his/her disapproval of any such report within 90 days after the date the report was transmitted to the Assistant Secretary by the Corps of Engineers, such report shall be considered to have been approved by the Secretary.

SEC. XXX

The Secretary shall credit toward the non-Federal share of the cost of an authorized flood control or ecosystem restoration project, and, subject to appropriations acts, reimburse the non-Federal interest for the Federal share of the cost of the project, costs for planning, engineering, design, and construction that are incurred by the non-Federal interest during planning, design, and construction of the project if the Secretary determines that the work performed by the non-Federal interest is consistent with and integral to the authorized project.

STATEMENT OF RAY POUPORE, EXECUTIVE DIRECTOR, NATIONAL HEAVY & HIGHWAY ALLIANCE

Mr. Chairman, thank you and ranking member, Senator Reid, for the opportunity to testify. I am testifying today as Executive Director of the National Heavy & Highway Alliance, in support of Water Resource Development Legislation. The National Heavy & Highway Alliance is comprised of the key building and construction trade unions which represent over one million highly skilled construction workers who build America's infrastructure. On behalf of our constituent organizations: The Laborers, Carpenters, Operating Engineers, Iron Workers, Cement Masons, Bricklayers, and the Teamsters, we urge this committee and the U.S. Senate to authorize the programs and projects necessary to meet America's inland and coastal water needs, and to reaffirm the critical role which the Corps of Engineers plays in that process.

Mr. Chairman before I get into the specifics of my testimony today, I want to digress for a minute to commend this entire committee for the tremendous job which you recently performed in passing a robust and strong highway reauthorization bill. Given the anemic numbers in the legislation which the House is likely to pass today, we strongly urge this committee to maintain its investment levels in any conference with the House. America needs the Senate's higher investment levels in order to meet the tremendous backlog of surface transportation projects.

Turning to the topic at hand, the construction unions which I represent today want to go on record in strong support of the authorization for the Corps of Engineer's Upper Mississippi River, and Illinois River waterway construction program.

Other panels today will give detailed testimony concerning the various economic and other reasons to upgrade the current 600 ft. locks to more modern and efficient 1200 ft. locks which would allow barge tows to more efficiently utilize the Illinois and Upper Mississippi lock and dam system. We associate ourselves with those remarks. A number of these locks and dams are 60 to 70 years old and simply cannot support the needs of a modern inland waterway transportation system.

River transportation has a long and proud history as a key component of America's economic growth. At critical junctures in that history, however, forces of nature have been tamed in order to provide for a more efficient and more productive use of our country's inland water resources. The Corps of Engineers has played a crucial role in this economic development. As much of the testimony from other panelists today will demonstrate, now is the appropriate time for Congress to authorize the Corps of Engineers to begin the planning and construction process for at least seven (7) new 1200 foot locks at Dam's: 20, 21, 22, 24 and 25 on the Upper Mississippi River, and at the La Grange and Peoria locks on the Illinois River. Additional capacity may be needed on other locks and dams in future years. Given the necessary planning process, we urge Congress to begin the authorization process at this time. While the Inland Waterway Trust Fund is available to pay a significant part of the projected construction costs, Congress will need to appropriate other funds to complete this multi-billion dollar program. Beginning the authorization process at this time will, in our view, enhance overall prospects for completion in a more cost-effective manner.

Almost every school child in America recognizes that the area served by the Upper Mississippi and Illinois Rivers is the breadbasket of the Nation. In a global economy, American farmers need a modern lock and dam system to effectively compete in world markets. We share their concern that unnecessary bottlenecks exist at this critical junction in our inland waterway system.

As construction craft unions, however, we will largely defer to the expertise of others in respect to the agricultural, environmental, and social benefits of an improved lock and dam system. Our institutional bias is to build America's many infrastructure projects in conjunction with our contractors. We constantly train our members in order to improve their skill levels which, in turn, provides the most cost effective and productive work force in America. But without paychecks, this highly skilled work force simply won't be fulfilling its productive potential. Our members feed their families, pay their mortgages and support the overall economy with their paychecks earned from actual project activity. That is how the construction industry works. In light of the continuing jobless economic recovery, we support an Upper Mississippi river lock and dam construction program which will provide thousands of good-paying jobs for our members throughout that region. While this lock modernization program will likely extend over the next 15-20 years, thousands of jobs would be created each year during the construction phase of this effort.

Based on our projections, over 45 million man-hours of labor could reasonably be anticipated in the construction of the 1200 ft locks. These are jobs that are American jobs and cannot be outsourced to foreign countries. Because of Davis-Bacon prevailing wage protections, these will also be good-paying jobs which will clearly maintain the living standards for construction workers and their families, whether carpenters, pile drivers, heavy equipment operators, laborers or iron workers throughout the region. Clearly these are the types of jobs which will provide economic growth for the entire regional economy. In short, this lock and dam reconstruction program is a significant job-creation effort which, hopefully, should be an important consideration for the Committee as it assesses the authorization of our country's water resource priorities.

We stand shoulder to shoulder with the Midwest Area River Coalition (MARC 2000) in advocating congressional authorization of this vital section of our inland waterway transportation network. In addition, we also recognize the beneficial environmental aspects of these proposed lock expansions. On a per capita basis, our trade unions probably have a higher percentage of hunters and fishermen than most other groups in society. We work outdoors and constantly work with "Mother Nature" in her various aspects. We respect clean air and clean water issues in our various communities. Accordingly, we are strong advocates of sensible environmental approaches when it comes to major construction projects. We believe that the new 1200 ft locks will improve the river ecosystem by allowing additional backwater restoration, riverbank stabilization and island reconstruction. It is important to note that this proposal is not a rebuilding of the entire system of locks and dams. Rather, a targeted approach to build additional lock capacity is at the heart of this proposal, which includes over \$150 million in beneficial environmental mitigation. The Corps of Engineers approach to developing additional 1200 ft locks, in our judgment,

strikes the appropriate balance between more efficient commercial enterprise and prudent environmental stewardship.

In closing, I reiterate that we as the key building trade construction unions strongly support the modernization of the Upper Mississippi and Illinois River lock system. These proposed upgrades will help ensure a more competitive economy, a sounder environment, and the creation of many skilled, good-paying jobs.

Thank you for the opportunity to be here today, Mr. Chairman, and I'll be glad to answer any questions that the committee may have now.

RESPONSE BY RAYMOND J. POUPORE TO ADDITIONAL QUESTION
FROM SENATOR JEFFORDS

Question 1. Our Committee understands that building infrastructure is building jobs. The Administration seems to disagree. According to your testimony, Corps projects likely boost the local economies around the construction and engineering activities. Aside from the project you specifically mentioned, how important to the skilled labor industries are other Corps projects in other parts of the country?

Response. Extremely important. Construction projects, no matter how large or how small they may be, create jobs. And not just in the construction field. They generate a myriad of jobs in the local economies where the project is being built in other fields as well, be it clerical, janitorial, security, transportation, food services, accounting/record keeping, etc. In fact, the Federal Highway Administration (FHWA) estimates that for every \$1 billion spent on highway construction a corresponding 47,500 jobs are created.

Therefore, it is easy to translate those estimates into infrastructure construction. By nature, U.S. Army Corps of Engineers projects are, on the average, much larger in terms of scope of work and dollar volume of construction than your standard highway project. Our job-tracking data system (which keeps track only of those projects that are estimated prior to bid at over \$10 million) shows that there are currently 148 Army Corps projects being constructed in thirty-six (36) states totaling over \$4.8 billion worth of construction (see enclosed).

By conservatively using the FHWA numbers by lowering its estimate to say that \$1 billion worth of infrastructure construction produces only 40,000 jobs, then right now in this country ongoing Corps projects have created almost 200,000 jobs. And, keep in mind, these projects are spread out over 148 job sites; i.e., 148 local communities and local economies.

Furthermore, our job-tracking system also reveals that there are currently ninety-nine (99) Corps projects in the planning stages covering twenty-eight (28) states and the District of Columbia totaling another \$4.8 billion worth of construction (see enclosed). Subsequently, these ninety-nine projects will be coming out for bid and will be under construction in the very near future. Again, conservatively using the FHWA estimates, another 200,000 jobs will be created. These are numbers that cannot be taken lightly in the current jobless recovery.

For further proof that construction projects are an economic stimulus to local communities, a few years ago the Construction Labor Research Council (CLRC, an employer-funded independent non-partisan organization) produced a study entitled "Highway Labor Costs and Government Revenues." This study not only clearly proved that building our nation's infrastructure is a sound economic investment, but that it reduced unemployment costs and returned to the Federal and state governments a return for every construction dollar spent.

The CLRC study found that for every dollar spent on highway construction for labor an average of \$2.40 in other economic activity, such as spending for basic needs like housing, food, etc., was generated. This \$2.40 is known as the "multiplier." The bottom line is that if a state or anyone else were told that it could get a fifty to sixty percent return on an investment, would it put up the money? The true question should be, who wouldn't?

There should be no argument whatsoever that investment in infrastructure is good for the economy. It provides onsite and offsite construction jobs whose workers then generate other jobs by spending their hard-earned money for goods and services. It provides revenue to the Federal and state governments in the form of taxes and a reduction of unemployment and social programs costs.

Once the economics of infrastructure funding and spending are really and truly understood, opposition will largely disappear. Building our infrastructure is building jobs.

Army Corps of Engineers Projects

State	Under Construction	Planned
New Jersey	8 projects—\$175.0 million	5 projects—\$137.5 million
Massachusetts	6 projects—\$177.7 million	1 project—\$15.0 million
Pennsylvania	2 projects—\$32.0 million	3 projects—\$550.0 million
Hawaii		2 projects—\$22.3 million
Rhode Island	1 project—\$15.0 million	
Georgia	10 projects—\$266.9 million	4 million—\$66.0 million
Washington, DC		1 project—\$37.5 million
North Carolina	5 million—\$153.2 million	4 projects—\$91.1 million
New Mexico	1 project—\$12.7 million	
Alabama	6 projects—\$158.2 million	2 projects—\$100.0 million
Iowa		2 projects—\$38.0 million
Florida	17 projects—\$453.8 million	31 projects—\$1.7 billion
Mississippi	2 projects—\$44.9 million	2 projects—\$118.3 million
Texas	8 projects—\$310.3 million	4 projects—\$61.4 million
Illinois	7 projects—\$747.7 million	
Indiana	3 projects—\$129.8 million	2 projects—\$30.0 million
Kentucky	4 projects—\$267.7 million	4 projects—\$430.0 million
Ohio	2 projects—\$33.5 million	
Louisiana	5 projects—\$93.6 million	4 projects—\$81.0 million
New York	10 projects—\$324.8 million	2 projects—\$122.5 million
California	11 projects—\$369.6 million	2 projects—\$44.9 million
Kansas		2 projects—\$86.0 million
Oklahoma	2 projects—\$40.0 million	
Delaware	1 projects—\$66.3 million	4 projects—\$102.0 million
Missouri	3 projects—\$59.7 million	
South Carolina		1 projects—\$15.0 million
Maryland	2 projects—\$38.3 million	
Nevada	4 projects—\$52.2 million	
Arkansas	1 project—\$10.0 million	2 projects—\$315.0 million
Tennessee	1 project—\$13.9 million	1 project—\$14.0 million
Minnesota	1 project—\$20.6 million	2 projects—\$30.0 million
Montana	1 project—\$14.0 million	
North Dakota	6 projects—\$99.7 million	1 project—\$70.0 million
Nebraska	1 project—\$15.0 million	
South Dakota	1 project—\$50.0 million	
Virginia	5 projects—\$105.7 million	1 project \$20.0 million
Washington	1 project—\$15.0 million	
Wisconsin	1 project—\$11.2 million	
Wyoming	2 projects—\$247.6 million	1 project—\$15.0 million
Alaska	5 projects—\$114.6 million	6 projects—\$240.0 million
Michigan		1 project—\$100.0 million
Idaho	2 projects—\$65.2 million	
Oregon		2 projects—\$186.0 million
Total	148 projects—\$4.8 billion	99 projects—\$4.8 billion

(May 7, 2004)

STATEMENT OF SCOTT FABER, WATER RESOURCES SPECIALIST,
ENVIRONMENTAL DEFENSE

Thank you for the opportunity to testify. My name is Scott Faber and I am a water resources specialist for Environmental Defense.

Environmental Defense supports reforms that would ensure that future civil works projects constructed by the U.S. Army Corps of Engineers are economically sound, and that the environmental impacts of future projects are fully mitigated. We strongly support S. 2188, introduced last month by Senators McCain, Feingold and Daschle, and will not support a Water Resources Development Act of 2004 that does not include long overdue reforms. Today, I would like to focus on three reforms: peer review, modern planning principles, and mitigation.

The Corps of Engineers has a critical role to play in the development, management, protection and restoration of America's rivers, lakes, bays and coastlines. Many Corps projects have provided significant economic benefits to the Nation by protecting our cities from floods and hurricanes, providing reliable waterborne com-

merce, and by providing sufficiently deep ports to promote trade. Unfortunately, too many projects have failed to provide as many benefits as predicted.

In the last 3 years, the General Accounting Office, the Army's own Inspector General, the National Academy of Sciences, and independent experts have found that proposed projects with costs totaling more than \$3 billion are based on inflated estimates of benefits, underestimates of costs and environmental impacts, or both. In one case, the GAO found that the benefits of a river deepening project had been overestimated by 300 percent.¹ In a second case, the GAO found that the Corps had overestimated the number of commercial vessels that would use an inlet.² Most recently, the GAO found that the Corps overestimated the number of homes that would be protected by a California flood control project, and dramatically underestimated project costs.³ In addition, the Army's own Inspector General concluded that Corps officials intentionally exaggerated the benefits of longer locks on the Mississippi and Illinois rivers.⁴ An independent expert concluded that the Corps' proposal to build the Yazoo Backwater Pumping Plant overestimated agricultural benefits by \$144 million⁵ and would, according to EPA, drain and damage almost 10 times as many wetlands as were estimated by the Corps.⁶

These miscalculations and mistakes have significant costs beyond their impact on the Corps' reputation and credibility.

First, billions of dollars have been spent on civil works projects that have failed to provide the promised return on investment. Only two of 14 waterway projects constructed since World War II for which data is available have attracted as much commercial traffic as predicted. For example, the Corps predicted in 1982 that 123.2 million tons of commercial traffic would flow through Lock and Dam 26 on the Mississippi River by 1998.⁷ Actual traffic flows were 73.7 million tons, or 60 percent of the Corps' prediction.⁸ The Corps predicted in 1978 that traffic on the Gulf Intracoastal Waterway would reach 82.7 million tons when the agency recommended replacement of Vermillion Lock. Actual traffic, including non-commercial traffic, was only 37.6 million tons in 1998, or 46 percent of the Corps' prediction.

Second, waterways with little or no traffic consume a disproportionate and growing share of waterway maintenance funds. While successful waterways like the Mississippi and Ohio face growing maintenance backlogs, 29 percent of annual maintenance spending is used to maintain waterways that host little more than 2 percent of commercial waterway traffic. For example, the Corps spends about \$5 million annually to operate and maintain the Apalachicola-Chattahoochee-Flint waterway even though barges on the waterway carry only about 20,000 tons of commercial traffic. By contrast, barges on the Ohio River annually carry 57.5 million tons of commercial traffic.

Third, civil works projects destroy the islands, wetlands, side channels, and other habitats that aquatic life need to survive, resulting in the extinction of some species and the decline of many more species, including commercially important species like salmon. But, the environmental impacts of these projects are rarely mitigated. The Corps has proposed mitigation for only 31 percent of the projects authorized for construction since 1986, according to the GAO.⁹ Even when mitigation is completed, the Corps frequently replaces wetlands, floodplain forests and other valuable habitats with fewer acres of less valuable habitat. For example, a Corps plan to dredge over 100 miles of the Big Sunflower River will damage 3,631 acres of wetlands. But, pro-

¹General Accounting Office, *Delaware River Deepening Project Comprehensive Reanalysis Needed*, GAO-02-604, June 2002 at 5.

²General Accounting Office, *Oregon Inlet Jetty Project: Environmental and Economic Concerns Still Need to Be Resolved*, GAO-02-803, September 2002.

³General Accounting Office, *Improved Analysis of Costs and Benefits Needed for Sacramento Flood Protection Project*, GAO-04-30, October 2003.

⁴U.S. Army Inspector General, *Report of Investigation*, Case 00-019, 2000, at 8.

⁵Leonard Shabman & Laura Zepp, "An Approach for Evaluating Nonstructural Actions with Application to the Yazoo River (Mississippi) Backwater Area"; February 7, 2000 (Prepared in cooperation with the U.S. Environmental Protection Agency, Region 4);

⁶U.S. Environmental Protection Agency, Technical Review Of The Draft Reformulation Report And Draft Supplement No. 1 To The 1982 Yazoo Area Pump Project Final Environmental Impact Statement (DEIS) (November 2, 2000), available at <http://www.epa.gov/region4/water/specialprojects/yazoo/>

⁷National Research Council, *Inland Navigation System Planning*. National Academy Process (2001), at 46.

⁸id.

⁹General Accounting Office, *Scientific Panel's Assessment of Fish and Wildlife Mitigation Guidance*, GAO-02-574, May 2002.

posed mitigation is limited to planting tree seedlings on only 1,912 acres of agricultural lands.¹⁰

These problems are well documented, and have invited criticism from a wide array of interests, ranging from the National Taxpayers Union to the New York Times. The Army's IG and four separate panels of the National Academy of Sciences have now called for reforms, including independent peer review. Even the Corps' leadership, in testimony to Congress and elsewhere, recognizes that the agency's ability to evaluate the benefits and costs of future projects must be improved.¹¹

Environmental Defense believes that the reforms included in S. 2188 will ensure that future studies are based on sound science and economics. We also believe that these reforms will restore trust in Corps feasibility studies by ensuring that credible economic tools are used to evaluate proposed projects, that studies proposing controversial projects or costly projects are peer reviewed, and by ensuring that the environmental impacts of proposed projects are fully mitigated. We further believe that the Corps should accelerate efforts to repair the historic damage done to America's great rivers, lakes and bays by dams, levees and other civil works projects that were not subject to modern mitigation requirements.

In particular, we believe peer review provides significant benefits. As the National Academy of Sciences noted in 1999, "peer review can improve both the technical quality of projects . . . and the credibility of the decisionmaking process."¹² Reviews would also identify or deter mistakes that could ultimately add to the cost and time of feasibility studies.

To be successful, peer reviews must have four features.

First, peer reviews must be truly independent. In particular, the office that appoints reviewers must be located outside the Corps, reviewers must have no financial relationship with the Corps, and reviewers must determine the scope of review. According to the National Academy of Sciences, the "independence of peer reviewers makes them more effective than internal reviewers because experts who are newly exposed to a project often can recognize technical strengths and weaknesses, and can suggest ways to improve the project that may have been overlooked by those close to it."¹³ In addition, external experts "often can be more open, frank, and challenging to the status quo than internal reviewers, who may feel constrained by organizational concerns."¹⁴

Second, peer reviews must not delay Corps studies. We propose that peer review overlap with public review, and propose that reviewers assess the same draft feasibility studies, reevaluation reports, and environmental impact statements that are subject to public review. Reviews of feasibility studies that have already begun should be subject to peer review if a draft study or report has not been issued on the date of enactment.

Third, the threshold for peer review must be predictable. As the NAS noted, "peer review program managers must have a systemic and credible approach for selecting which projects . . . are reviewed by the peer review program."¹⁵ Accordingly, we urge the committee to adopt four triggers for review: projects that cost more than \$25 million; a request for review by the Governor of an affected state; a request for review by the head of a Federal agency charged with reviewing the project; and, a determination by the Secretary of the Army that there is a significant public dispute concerning scope, impact, or cost-benefit analysis of the project.

Finally, we believe the Corps should be required to respond the report of a peer review panel, and provide a written response providing a rationale for any panel recommendations that have not been adopted.

¹⁰Final Project Report and Supplement No. 2 to the Final Environmental Impact Statement, Flood Control, Mississippi River and Tributaries, Yazoo Basin, Mississippi, Big Sunflower River Maintenance Project, Volume I, Project Report, Supplemental Environmental Impact Statement, and Appendices A-C, July 1996, at Appendix B, U.S. Fish & Wildlife Coordination Act Report at i.

¹¹General Robert Griffin, former director of civil works, noted in an e-mail to Corps employees, "we have seen clear signs that our planning expertise and capability have declined to a point where specific action is required by USACE leaders to reverse this unacceptable trend. While pockets of excellence no doubt remain, this overall decline is beginning to have unacceptable consequences to the very foundation of the civil works program—the basis of our investment recommendations." Gen. Griffin added that some plans developed by Corps districts "cannot withstand national level scrutiny."

¹²National Research Council, *Peer Review in Environmental Technology Development Programs*, National Academy Press (1999) at 29 (emphasis in original).

¹³Id. at 30

¹⁴Id.

¹⁵National Research Council, *Peer Review in Environmental Technology Development Program*, National Academy Press (1999) at 31.

We also believe that the Corps must employ economic tools that fairly assess the benefits and costs of proposed projects.

As a recent panel of the NAS noted, the Corps continues to use economic tools that overestimate future river traffic, and that overestimate how many shippers will use waterways when the cost of shipping by barge increases.¹⁶ The Corps also continues to ignore or improperly evaluate less costly alternatives to large civil works projects. A recent NAS panel urged the Corps to consider alternatives to longer locks on the Mississippi and Illinois rivers,¹⁷ including traffic scheduling and helper boats, which could reduce a 90-minute lockage by 20 minutes or more and which would cost less than \$50 million annually to operate. But, the Corps has largely ignored alternatives to the \$2.3 billion lock expansion project even though river traffic has been flat since 1980 and has actually declined in recent years.

In combination, peer review and the use of credible economic tools will ensure that future projects will return significant benefits to the public.

This is especially important in light of the \$41 billion backlog of active civil works projects already authorized for construction. In recent years, Congress has appropriated less than \$2 billion annually for the construction of new projects. Authorizing questionable new construction projects would delay the construction of more urgently needed projects. For example, building seven new locks and extending the length of five existing locks on the Mississippi and Illinois rivers would cost approximately \$191 million annually, and would not be completed until 2035.¹⁸ Rather than adding questionable projects to the growing backlog of authorized projects, Congress should instead reduce the backlog of authorized projects, as proposed in S. 2188.

When a project is clearly necessary and cost-justified, the Corps should fully mitigate the environmental impacts of a project.

We believe successful mitigation has four features.

First, mitigation projects should replace each acre of habitat with an equivalent or superior acre of habitat. Second, mitigation projects should not only restore each acre of habitat, but should also restore the hydrologic processes that have been impacted by project construction. Third, mitigation plans should have specific ecological success criteria, a detailed mitigation plan, and a detailed description of the lands to be acquired. Fourth, mitigation should be completed concurrently unless that is physically impossible. In those rare cases when concurrent mitigation is physically impossible, the Corps should complete mitigation by the end of the subsequent fiscal year. A mitigation tracking system should be established to ensure that mitigation is completed and is successful.

Finally, we strongly support efforts to ensure that working rivers like the Mississippi remain living rivers as well. Building dams and levees destroyed millions of acres of wetlands and other habitats and robbed rivers like the Mississippi of the ability to build new side channels and wetlands. Far more than fish and wildlife is at stake. Millions of Americans depend upon the health of resources like the Mississippi, Columbia, and the Chesapeake for their economic livelihood. For example, recreation on the Mississippi River generates more than \$1 billion in annual spending which supports more than 30,000 jobs.

Although the Fish and Wildlife Coordination Act of 1958 directed the U.S. Fish and Wildlife Service to propose mitigation for civil works projects, mitigation was not required until passage of the Water Resources Development Act of 1986. Consequently, the environmental impacts caused by the construction and operation of the vast majority of civil works projects have not been mitigated. If we do nothing to reverse the decline of degraded resources like the Mississippi, millions of jobs will be lost and scores of species will face extinction. In many cases, the Corps is the only Federal agency with the jurisdiction and expertise needed to restore lost habitats.

As the Committee develops the Water Resources Development Act of 2004, we urge you to include reforms that will ensure that future civil works projects are economically sound, and that the impacts of future projects are fully mitigated. We further urge you to accelerate Corps efforts to reverse the decline of America's great rivers, lakes and bays.

Thank you for the opportunity to testify.

¹⁶ National Research Council, *Review of the U.S. Army Corps of Engineers Upper Mississippi River-Illinois Water Navigation Study: An Interim Report*, December 2003.

¹⁷ *Id.*

¹⁸ U.S. Army Corps of Engineers, *Alternative Formulation Briefing Pre-Conference Report for the UMR-IWW System Navigation Feasibility Study*, February 2004, at 110.

STATEMENT OF GEORGE C. GRUETT, EXECUTIVE VICE PRESIDENT, MISSISSIPPI
VALLEY FLOOD ASSOCIATION

Mr. Chairman and Members of the Subcommittee, my name is George Gruett and I wish to thank each of you for the kind invitation to address the Subcommittee today and speak on the role for the United States Army Corps of Engineers in meeting the water resources needs of the Nation.

I do not appear here today as an expert but only one that has a number of years of experience in Flood Control, Navigation and Major Drainage. I retired from the United States Corps of Engineers in 1980 with 35 years of Federal Service and immediately accepted the position that I hold today. This is my 24th year as Executive Vice President of the Mississippi Valley Flood Control Association and when you add those two numbers together it's easy to see that I'm fast approaching 60 years of experience in water resources. I fought my first flood on the Mississippi River in 1950 and on the Missouri River in 1952 and on the Kuskokwim River in Alaska in 1957.

My years of experience in Water Resources pale next to the United States Army Corps of Engineers, which will soon celebrate its 230th year. It was 180 years ago that the Congress in its wisdom gave the Corps of Engineers the responsibility for the Improvements of the Nation's Rivers and Harbors. Some of the Levee Boards located along the Lower Mississippi River have been in continuous existence and serving the millions of people in the alluvial valley for 140 years. The Mississippi River Commission was authorized by the Congress in June of 1879 and this June will celebrate its 125th Anniversary. Next year the Mississippi Valley Flood Control Association, which I'm privileged to serve, will have 70 years of providing the Agency for all the people of the Mississippi River Valley to speak and act jointly on all water resources needs.

Over these many, many years the Partnership of Corps of Engineers, the U.S. Congress and the Local People has worked like a well designed and well oiled machine that has played a major role in making the United States the greatest industrial and commercial Nation on this planet. With our improved natural resources and productive capability we have saved the World in War and sustained it through many years of troubled peace.

Today this Congress and we are faced with the almost unbelievable fact that there are some that would eliminate the United States Corps of Engineers Civil Works Mission in this country. These individuals and/or groups are either driven by some ulterior motive or they are completely devoid of common sense or lack the ability to reason.

Today, I believe this Subcommittee is meeting not only to hear about the Corps of Engineers role in meeting the Nation's Water Resources needs but also to consider a Water Resources Development Act that will, when passed, authorize new and additional projects and studies but will also be a wonderful opportunity for the Congress to reject all attempts by the executive branch to dictate policy matters pertaining to water resources.

We have addressed to our Senators some of the items the local people would like to see in the Water Resources Development Act and I shall mention only a few of these.

We would desire that the Bill contain proper wording to extend for no less than 10 years the Authorization of Projects that will be de-authorized because no funds have been allocated in a period of years as specified in the WRDA of 1986.

Provide proper wording that would raise the Limitation on the Amount of Funds that can be expended on Continuing Authority Projects and Small Projects Not Specifically Authorized by the Congress in order to better express present day conditions. As a suggestion, these Limitations should be at least doubled.

Omit the words in the House Version (H.R. 2557) under Sec. 2033, Independent Peer Review, (B) Discretionary.

I would like to return to the role of the U.S. Army Corps of Engineers in meeting the nation's water resources needs. That role of course, was given to the Corps of Engineers by the Congress of the United States. I mentioned earlier that in 1824 the Congress gave to the Corps the authority and the responsibility to improve the Nation's Rivers and Harbors. That, in general, took care of the Navigation Mission for the Corps. The first authorization for Federal Flood Control took place in 1917 and the landmark Act of 1928 made Flood Control in the Lower Mississippi Valley a Federal Responsibility. In 1936, two Flood Control Acts were passed. The so-called Overton Act expanded Flood Control in the Lower Mississippi Valley and the Copeland Act covered the remainder of the Nation. In 1986 a third mission was added to the Corps' responsibilities, that of Protection and Restoration of the Natural Environment. The Corps has performed these three missions in an exemplary

fashion over these many years and because of them our Inland Waterways, our Flood Control and our Natural Environment are the envy of the rest of the World.

Mr. Chairman, I would again like to express my appreciation for the opportunity to make this Statement a part of the printed record.

STATEMENT OF HON. BOB YOUNG, MAYOR OF AUGUSTA, GA

On behalf of the U.S. Conference of Mayors I thank the Committee for allowing me to provide a written statement on the "Water Resources Development Act of 2004".

My purpose today is to provide the Committee with perspectives I have gathered as Co-Chairman of the Urban Water Council and chairman of the Environment Committee, from meetings formal and informal with other Mayors around the Nation for the last few years. Undoubtedly, water supply issues have surged to the forefront of urban problems. The variety of types of water supply problems, as well as their severity, is striking.

I have attached my testimony in two hearings last year before the House Subcommittee on the Environment and Water Resources. These statements share some important examples of water problems facing our cities. In this statement I will address some ways that cities and the Federal Government, particularly the Corps of Engineers, can work together to improve management of our water resources.

Much is at Stake. Recent droughts and water shortages have made us aware that we cannot take water for granted. The stakes are high. We must meet water challenges if we are to support economic growth in an environmentally sustainable way and assure the quality of life of our people.

A Need for Better Information is a Common Thread. We need to better understand water problems both nationally and in individual watersheds. At the national level, I would like to commend to your attention H.R. 135, the "Twenty First Century Water Commission Act of 2003." Representative John Linder and the bi-partisan leadership of the House have demonstrated great foresight in passing this bill last year. I sincerely ask you to help us pass H.R. 135 in the Senate during this session. This legislation will give us the national information we need to begin crafting our Twenty First Century water management strategy.

One thing in common for all of the cases I have seen during my involvement with the Urban Water Council is a lack of recognition of the seriousness of water resources problems; and, a lack of effective planning to use current water resources more efficiently and effectively. The Federal Government can play a lead role in the form of technical assistance to achieve the needed level of planning so that American cities and states, neighboring watersheds, and the network of rivers can be made to meet our economic and cultural needs. Data, technical expertise and analysis to support good water planning are essential to success. In an era of fiscal restraint across all levels of government, investment in good water planning has even greater payoffs. All levels of government can benefit in more holistic management and shared savings in resources.

Federal leadership in planning is critically important in watersheds that involve more than one state. We've seen how independent planning by one state can penalize another. And, we've seen how compacts are not the cure-all. Using the technical assistance, body of research and leadership of the Corps and other Federal agencies, states and local jurisdictions can be guided toward rational and beneficial use of shared water resources, thus precluding the intervention of the courts.

The states of Georgia and South Carolina have been working with the Corps for a couple of years on a comprehensive study of the Savannah River Basin. This historic report will provide the baseline to guide state and local governments through the important process of planning for the future use of shared resources. Funding from Georgia and South Carolina is supplementing the Corps' financial participation.

I am aware that several states are responding to water management challenges within their borders. In my own state, the legislature is considering a bill to direct preparation of a state water plan. Georgia would join Texas and Pennsylvania as recent examples of the willingness of states to shoulder responsibility for integrated management our precious water resources. These state-led water planning efforts have a very important thing in common: They are collaboratively built with bottom up participation of cities and water districts and emphasize regional solutions to water problems. The Federal Government must encourage this approach across the Nation.

The Corps of Engineers Can Bring Valuable Assistance to States, Tribes and Local Governments. The Corps of Engineers is uniquely situated to states, tribal and local

government leadership in integrated water planning. We need the Corps' data, technical assistance and their internationally recognized water models to help us in making better decisions.

In Augusta, we have previously partnered with the Corps of Engineers for improvements in the Oats Creek basin to abate repetitive flooding problems in low-income residential areas. We are currently working with the Corps on development of similar modeling for the Raes Creek and Rocky Creek Basins, the historic Augusta Canal National Heritage Area and Phinizy Swamp. Without the expertise and financial resources of the Corps of Engineers, the city of Augusta would never have been able to undertake this work.

I should add that we have been able to leverage additional dollars through FEMA's Flood Hazard Mitigation program to accomplish some of the projects identified in the Corps' reports.

As you consider the Water Resources Development Act of 2004, I urge the Committee to consider expanding the Corps mission to include supporting state, tribal and local governments as well as interstate water organizations in planning and designing responses to our nation's water challenges. The House Water Resources bill, H.R. 2557, has two provisions that contribute to the Corps ability to help state and local governments. These are Section 2019, Watershed and River Basin Assessments and Section 2025, Technical Assistance. I ask you to consider these and other proposals that may be made to increase the Corps support to cities across the country.

I want to thank the Committee again for permitting me to share these views. Anything we can do to emphasize the importance of water resources in an era of scarcity is important. Water is a valuable public resource and we need to treat it as such. We need to better understand the nation's water situation in order to make good public policy decisions. It is vitally important to have a point of reference for the status of water in the Nation in order to determine short and long-term plans regarding water usage, conservation, as well as potential new sources of usable water. On behalf of the Conference of Mayor and its Urban Water Council, I look forward to working with you on this important legislation.

STATEMENT OF E.G. ROD PITTMAN, CHAIRMAN, TEXAS WATER DEVELOPMENT BOARD

I am pleased to provide remarks to the Committee on the Water Resources Development Act of 2004. The Committee's leadership on this issue ensures that the nation's water resources are managed responsibly. My remarks will focus on the magnitude of water supply needs in Texas and how the U.S. Army Corps of Engineers can play a role in meeting the challenges of ensuring adequate water supplies to meet the needs of the State's people, economy and environment.

TEXAS WATER DEVELOPMENT BOARD

The Texas Water Development Board's (Board) mission is to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas. To accomplish its goals of planning for the state's water resources and for providing affordable water and wastewater services, the Board provides water planning, data collection and dissemination, financial assistance and technical assistance services to the citizens of Texas.

In 1998, the Board initiated a regional water planning process to document the water supply needs in the State, and to develop water management strategies for meeting those needs. To ensure a bottom-up approach to planning, the State was divided into 16 regional water planning groups. These planning groups are the foundation for developing strategies for meeting water needs across Texas.

STATE WATER PLAN

The State Water Plan, Water for Texas—2002, is a grass roots approach to ensure future water supplies for almost all identified water needs in Texas for the next 50 years. The plan is based on extensive public participation and local and regional decisionmaking. Over the initial 3-year planning process, more than 450 voting and nonvoting community and interest group leaders representing the 16 regional water planning groups held more than 900 public meetings across the state to develop strategies for meeting water needs over the 50-year horizon.

According to the State Water Plan, the population of Texas is expected to grow from nearly 21 million in 2000 to about 40 million in 2050. Total projected demand for water is expected to increase by 18 percent, from nearly 17 million acre-feet per year in 2000 to 20 million acre-feet per year in 2050. In contrast, water supplies

over that same time period are expected to decrease by 19 percent, from 17.8 million acre-feet per year in 2000 to 14.5 million acre-feet per year in 2050.

When comparing future water demands with supplies from existing sources, the regional water planning groups identified 883 water user groups that will need additional water supplies within the next 50 years. Water user groups included municipal, manufacturing, steam-electric power, mining, irrigation, and livestock. After identifying the needs, the regional water planning groups evaluated and recommended a variety of different water management strategies to meet the needs. The Texas Water Development Board recognizes that some of these needs are immediate. While the State Water Plan covers a 50-year period, the need to implement strategies in the next five to 10 years is a crucial step for the present and future of water in Texas and the United States. The total capital cost of implementing all of the water management strategies in the State Water Plan is approximately \$18 billion. Please keep in mind that the estimated \$18 billion cost is for water supply capital only and does not include infrastructure, wastewater treatment or flood control. Obviously, the magnitude of water supply needs is enormous. The State and local communities will need to leverage resources in order to make any progress toward implementing the water management strategies laid out in the State Water Plan. Again, a significant portion of the resources is needed over the next 5 years to avoid a costly backlog of implementation strategies and projects.

U.S. ARMY CORPS OF ENGINEERS

The Corps of Engineers possesses valuable resources that could be immediately brought to bear in assisting State and local governments in integrated water resources planning. Speaking from the perspective of my home state, Texas could benefit greatly from Corps data, technical expertise and project assistance. Recently, Board staff has been working more closely with the Corps, and the benefits from this enhanced relationship confirms that the payoff for even more collaboration is considerable. As you consider the Water Resources Development Act of 2004, I strongly encourage the Committee to consider expanding the Corps' authority to provide for technical and project assistance to State and local governments in addressing water supply issues.

The importance of an increased Corps role in water supply cannot be understated. While many States, particularly Texas, have invested significant resources to plan for future needs, the ability to address such needs now and in the future will require a leveraging of resources from Federal, state and local entities. The Corps provides valuable data, and technical and project expertise that should be directed where leveraging results in the greatest national benefit—water supply for our people, economy and environment.

Thank you for the opportunity to provide a State perspective on the integrated management of our water resources. Board staff stands ready to assist the Committee as it takes up this important piece of legislation.

ELLEN POSIVACH, CITY MANAGER, TARPON SPRINGS, FL

I am Ellen Posivach, the City Manager of Tarpon Springs, Florida. Thank you for allowing me to provide testimony on this very important topic.

Tarpon Springs is located along the west coast of Florida within the Tampa Bay Region. The Tampa Bay Region along the west coast of the State of Florida is home to nearly 3 million residents. In addition, approximately 5 million tourists visit the area annually to enjoy the gulf coast area. The Tampa Bay region is growing rapidly, which places a stress upon our natural resources, particularly our water supply.

Inland freshwater wellfields have provided the historical water supply for the region. Over time, the concentrated pumping from these freshwater wellfields has produced measurable environmental damage, including dried up lakes and wetlands. In response to this problem, the regional water management district, the Southwest Florida Water Management District (SWFWMD), has placed limits on the withdrawals from 11 overstressed regional facilities.

The Tampa Bay region now uses an average of 247 million gallons of drinking water every day (mgd). Of this, our regional water supplier Tampa Bay Water supplies 158 mgd to its members, all of this from groundwater. As part of the regulatory limits, fresh groundwater pumping is required to be cut to 121 mgd by 2003 and 90 mgd by 2008. The only way we can do this is by developing an alternative system of water supply that is dispersed and separated from current areas of withdrawal.

Current water and sewer rates in the Tampa Bay Region are as high as *twice the national average* for a typical single-family household usage of 7,000 gallons per month.

The city of Tarpon Springs has developed an Alternative Water Supply Plan based on the study of available water resources with a cost-effective approach to achieve a sustainable quality water supply. A key component of this plan is the utilization of state-of-the-art membrane treatment to convert unusable brackish groundwater to drinking water. Through a number of dispersed, moderate capacity wells located near the gulf coast, needed water supply can be produced locally in a sustainable fashion while enhancing the recovery of previously overpumped inland wellfields.

The initial proposed water supply facility will produce 5.0 mgd of finished water with the capability of future expansion. The City has completed a preliminary cost estimating, site review, and discussions with the public for the proposed project. The public has provided positive input on the need to develop alternatives to freshwater pumping. The preliminary cost estimate for the complete 5.0 mgd project is \$37 million.

As the next step, the City is reviewing a test well program to confirm the suitability of groundwater in this area. The completion of the facility would supply sufficient water for the City's needs, and additional water available for other water suppliers in the region. This project is anticipated to accommodate future capacity expansion of at least 3.0 mgd to further meet the needs of the region.

The proposed Alternative Water Supply Plan will allow previously over-pumped areas to recover so that the environment can be sustained and protected.

Alternative Water Supply projects like this are consistent with the U.S. Army Corps of Engineers (USACE) "Environmental Operating Principals" which include striving to achieve environmental sustainability, seeking a balance and synergy among human development and natural systems through the design of economic and environmental solutions, and finding win-win solutions to the nation's problems that also protect and enhance the environment.

We believe alternative water supply projects such as this can only be achieved with the combined efforts of Federal agencies, state and local governments, and the private sector. We have initiated partnering with each of these groups and we ask for your support in allowing Federal programs of this type to remain sufficiently funded. By working together to develop sustainable regional water supply sources, we can protect our environment today and for future generations. We look forward to working with the USACE in seeing this initiative to success.

Further technical information is available from the following of the city of Tarpon Springs: Paul Smith, Public Services Administrator (727) 942-5610; City Manager Ellen Posivach (727) 938-3711.

Further policy related information is available from the following of the city of Tarpon Springs: Mayor Beverley Billiris (727) 938-3711.

On behalf of the citizens of Tarpon Springs, Florida, and millions of Florida west coast residents who must rely on the area's surface and groundwaters, we ask the Committee to consider this testimony in prioritizing authorizations for additional USACF projects to assist in developing alternative water supplies in areas of great need. These project authorizations will allow projects to be completed for environmentally sustainable supply while maintaining affordability for our citizens.

STATEMENT OF THE NATIONAL ASSOCIATION OF FLOOD AND STORMWATER MANAGEMENT AGENCIES

The National Association of Flood and Stormwater Management Agencies (NAFSMA), which represents more than 100 local and state flood control and stormwater management agencies serving a total of more than 76 million citizens, is pleased to submit comments addressing the need for a Water Resources Development Act of 2004. NAFSMA supports language in WRDA 2004 to expand U.S. Army Corps of Engineers technical assistance to State and local agencies for local water planning. The association also supports the authorization of adequate funding to carry out this activity.

NAFSMA also supports the policy changes approved by the House of Representatives in Title II of the House-approved WRDA bill, H.R. 2557. In particular, NAFSMA urges the Senate to include similar provisions in the Senate bill to move the establishment of a new partnership agreement with local sponsors and provisions to allow the District Engineer to sign those agreements with local sponsors.

NAFSMA's members are public agencies whose function is the protection of lives, property and economic activity from the adverse impacts of storm and flood waters.

NAFSMA member activities are also focused on the improvement of the health and quality of our nation's waters.

The mission of the association is to advocate public policy, encourage technologies and conduct education programs to facilitate and enhance the achievement of the public service functions of its members. Many of NAFSMA's members are currently involved in ongoing water resources projects with the Corps of Engineers, including flood management and environmental restoration projects.

Since the organization was formed in 1979, NAFSMA has worked closely with the U.S. Army Corps of Engineers and other Federal agencies, including the U.S. Environmental Protection Agency and the Federal Emergency Management Agency. Many of our members are local sponsors on Corps-partnered flood control and environmental restoration projects with the Corps.

NAFSMA members are on the front line protecting their communities from loss of life and property and therefore the organization is keenly aware that flood management measures are a necessary investment required to prevent loss of life and damages to people's homes and businesses. Flood management has proven to be a wise investment that pays for itself by preserving life and property and reducing the probability of repeatedly asking the Federal Government for disaster assistance. The Corps of Engineers has played a vital and necessary role in meeting the nation's flood management needs.

We appreciate your efforts to adopt a WRDA this year and offer our assistance in your work to achieve this goal. Please call Executive Director Susan Gilson at 202-218-4133 if you have questions.

STATEMENT OF THE INTERSTATE COUNCIL ON WATER POLICY

The Interstate Council on Water Policy (ICWP), a national organization representing state, interstate and regional water resources management agencies, appreciates the opportunity to submit this statement for inclusion in the record of the March hearing on the U.S. Army Corps of Engineers Role in the Nation's Water Resource Needs in the 21st Century.

ICWP in particular, would like to address its comments to the need for a Water Resources Development Act of 2004. We appreciate the committee's efforts to move a WRDA bill this congressional session and support the inclusion of language in this legislation to expand U.S. Army Corps of Engineers technical assistance to State, interstate and local water resource management agencies for local water planning. ICWP also supports the authorization of adequate funding to carry out this activity.

INCREASED STATE PLANNING ASSISTANCE

ICWP encourages an increase in planning assistance provided to states under Section 22 of Public Law 93-251 (42 U.S.C. 1962d-16).

SUPPORT FOR REGIONAL ENVIRONMENTAL RESTORATION APPROACHES/SEDIMENT MANAGEMENT

ICWP feels the Corps' capabilities are critical to the area of environmental restoration dealing with sediment management. ICWP urges the Corps to work with non-Federal sponsors to address regional sediment issues.

DEVELOPMENT OF PARTNERSHIP AGREEMENT

ICWP also supports legislative efforts to develop a new partnership agreement for flood control projects that reflects the Federal partnership with local sponsors in carrying out these critical activities. ICWP also supports moving approval and signing of this agreement to the District level.

CLARIFICATION OF MODEL AGREEMENTS

Some states have expressed concerns about the lack of uniformity and flexibility involving model feasibility, project cost share and planning assistance to the states agreements, primarily related to state anti-deficiency constitution and laws that prevent state or local governments from unconditionally committing future funds. Federal law relating to such model agreements should be amended to clarify that model agreements developed by the Secretary shall contain provisions to recognize limitations imposed by States' anti-deficiency laws.

We appreciate your efforts to adopt a WRDA this year and offer our assistance in your work to achieve this goal. Please feel free to have your staff call ICWP Executive Director Susan Gilson at 202-218-4133 if you have any questions. As an organization with members who partner with the Corps in various capacities, we very

much appreciate this commitment. Since 1986, Congress has worked hard to keep with this 2-year renewal process and we as sponsors applaud this effort.

STATEMENT OF AMERICAN SHORE AND BEACH PRESERVATION ASSOCIATION

Mr. Chairman and Members of the Subcommittee, the American Shore and Beach Preservation Association strongly supports passage of a Water Resources Development Act in 2004. We are deeply concerned that the totality of America's water infrastructure is in serious, if not critical, disrepair. While this cannot be solved with the passage of this WRDA bill—or even a single year's infusion of massive amounts of funding—the passage of WRDA 2004 sends a signal to all concerned that Congress places a high priority on America's water resources infrastructure.

SUPPORT THE FEDERAL BEACH NOURISHMENT PROGRAM

For the past several years, the White House Office of Management and Budget has produced an annual attack on the Federal Beach Nourishment Program. This year's attack is far more serious than any of its predecessors. Within the context of the President's Budget Recommendations for Fiscal 2005, OMB is attempting to overturn clear policies set by Congress. OMB has made a "determination" that the periodic renourishment of beaches is a "maintenance" function despite the fact that every single beach nourishment project authorized by Congress in WRDA bills enacted into law over the past four decades has stated quite specifically that periodic renourishment is an integral part of the authorized construction project. OMB has made a "determination" that budgeting for periodic renourishment will not be supported despite the fact that Congress has said otherwise as recently as WRDA 1996 (Section 227). OMB has made a "determination" that the ongoing portions of environmental restoration projects will no longer be supported despite policy to the contrary set by Congress in WRDA 1992 and WRDA 1996. Equally objectionable is OMB's "determination" that the funding of ongoing projects to mitigate for shoreline damage caused by navigation projects will no longer be supported. Their position ignores the clear meaning of Section 111 of WRDA 1986.

We urge this Subcommittee to send a clear message to the White House Office of Management and Budget that its efforts to undermine the Federal Beach Nourishment Program are rejected categorically. That can be done by adopting WRDA bill language reaffirming and strengthening that program. ASBPA recommends the inclusion of the language contained in S. 2105, the Coastal Restoration Act, to accomplish that objective. We also have attached to this statement language to strengthen the mitigation responsibilities of the Federal Government for damages caused to shorelines by federally-maintained channels. Taken together, these two legislative provisions will demonstrate to coastal communities, Employees of the Corps of Engineers, and—most of all—the Administration that Congress is not wavering in its support for the Federal Beach Nourishment Program.

Mr. Chairman, it is impossible for coastal communities to feel that they have a reliable partnership with the Federal Government when, despite the fact that they have a project authorization from Congress that includes Federal cost-share participation in periodic renourishment for a period of up to 50 years, and despite the fact that they have signed contracts (Project Cooperation Agreements) with the Federal Government that also include commitments for periodic renourishment, they nevertheless get letters on government stationery from the Assistant Secretary of the Army telling them that the Administration will not honor those agreements. Dozens of local and state government officials have made fiscal plans to meet their share of those commitments, only to be told that the Administration has "determined" it will renege on those commitments—not just this coming fiscal year but forever more.

We urge this Subcommittee to continue congressional support for a program that produces at a minimum \$2.50 in benefits for every tax dollar spent.

EXTEND AND MODIFY THE "SECTION 227" SHORELINE TECHNOLOGY DEMONSTRATION PROGRAM

ASBPA urges this Subcommittee to include in WRDA 2004 bill language which extends the authorization of the program established in Section 227 of WRDA 1996 to test new technologies that offer the hope of restoring shorelines in ways that may be cheaper and more effective. Due to funding constraints, this program got a late start. However, it is well underway and deserves to be extended. We also recommend language that will enable the Federal Government to pay for at least a portion of the cost of removing technology that has not proven to be effective. Having

paid for its installation, the Federal Government and not local governments should pay for any demonstration projects that may fail. Adding this provision will remove an obstacle to getting local governments to participate in the Section 227 program.

AUTHORIZE A CORPS REGIONAL SEDIMENT MANAGEMENT PROGRAM

Regional sediment management is a concept that involves a holistic approach to coastal water resources planning and project formulation. Constructing a beach project in one county affects the shoreline of the next county to the south. Deepening a port channel can affect nearby shores. Sand that is dredged from a channel can be placed offshore or it can be kept within the sand system by placing onshore or nearshore. Sand that is taken from a channel can be used to create new coastal wildlife habitat. These are but a few of the examples of what can be done if the Corps of Engineers is given authority to plan ongoing projects that take account of all the essential resource components of the region. The use of regional sediment management (or RSM) is good for the environment and for water infrastructure. It also will save taxpayer dollars at the Federal, State, and local levels through the combined planning of projects that are currently most likely to be planned and constructed individually. ASBPA supports the RSM programmatic language requested by Senator Hillary Rodham Clinton.

INCREASE THE SECTION 103 PROGRAM LIMITS

The Section 103 program is a Continuing Authorities Program that enables small shoreline protection projects to be constructed. However, the \$3 million statutory project limit does not permit the program to be used to place sand on beaches where periodic renourishment is required. At this out-dated dollar limit, the program is more useful for constructing seawalls and other hard structures. We urge this Subcommittee to raise the Section 103 per-project limit to at least \$20 million and to make a similar adjustment to the total annual amount authorized for the program.

GIVE THE ECONOMIC BENEFITS OF RECREATION THE SAME WEIGHT AS STORM DAMAGE REDUCTION BENEFITS

Beach projects provide significant storm damage reduction benefits. For homes near the coast, the best protection against wave surges is a healthy beach with a sound dune structure. However, the statutory language authorizing the Federal beach nourishment program provides two purposes for that program (33. U.S.C. 426(e)): First, to prevent erosion; Second, to promote public recreation. Beginning with WRDA 1986, however, a change was instituted which downgraded the importance that Congress had attached to the recreational benefits of beach nourishment projects. Prior to 1986, the Federal Government could participate in beach projects whose primary benefit was to promote public recreation. That is no longer the case.

Beaches nourished with Federal financial participation must be fully accessible to the public. The history of the Federal program is replete with examples of the Corps of Engineers enforcing its requirements to provide adequate public access and parking spaces. Public access means public use and public use means economic benefits, not only for the local region but for the state and nation, as well. People spend money on food, lodging and other items. That spending creates jobs with taxable incomes and supports businesses with taxable profits. Two-thirds of those tax benefits go to the Federal Treasury. Yet, the Corps does not count these economic development benefits. They do give some weight to their definition of recreation benefits. This is often expressed through the Unit Day Value method of recreational benefit calculation. How much would an individual value his or her beach experience for a day? And how many visits are made by people over a beach season? Those benefits—which we contend are not a sufficient measure of the recreational value of beaches—currently cannot exceed more than 50 percent of the total benefits of a proposed beach project.

We urge this Subcommittee to adopt language in WRDA 2004 similar to that proposed by Senator Inouye (S. 1653) to require that the economic benefits of beach recreation be given equal weight with storm damage and environmental restoration in determining the national (NED benefits) of beach projects.

STRENGTHEN AND MODIFY SECTION 111 MITIGATION AUTHORITY

Section 111 of WRDA 1986 provided authority for the Corps to investigate, plan and implement measures that would mitigate for shore damages caused by Federal navigation projects. The Administration has “determined” that it will not budget for any ongoing components of a mitigation project. I have attached to this statement proposed language with clarifies that ongoing work is an integral part of Section 111

projects, where the Corps determines that such work is appropriate, and which makes other clarifying changes in that provision of law.

Mr. Chairman, we appreciate the support both the Subcommittee and the full Committee have given to America's water resources needs. We also appreciate the attention you have given to the process by which those needs are met. We hope that you will adopt the suggestions we have made as part of your WRDA 2004 bill and offer to work with you in any way that will help to get that bill enacted into law this year.

ATTACHMENT A

THE COASTAL RESTORATION ACT—S. 2105

Since 1995, the Federal beach nourishment program has been a regular target of the White House Office of Management and Budget. Under two different administrations, one Democrat and the other Republican, there have been at least five efforts to radically change or terminate the program.

In 1996, Congress passed the Shore Protection Act as Section 227 of the Water Resources Development Act of 1996. That legislation was the first statement by Congress since 1946 of its intent that there be an ongoing Federal beach nourishment program. Unfortunately, that has not stopped OMB from trying to changing Federal policies by making budget proposals that would cripple the program.

The Coastal Restoration Act raises the stakes for OMB. It restates the congressional intent regarding the vitality of the Federal beach nourishment program. However, it goes far beyond. The CRA makes it clear that changes in administration policy will not prevent feasibility and other types of studies from being processed through the Corps and sent to Congress. The legislation emphasizes the role of Congress in determining which beach nourishment projects should be authorized for constructed. It also re-states and strengthens existing law that periodic renourishment is an integral part of the ongoing construction of a beach nourishment project.

SECTION-BY-SECTION SUMMARY

Declaration of Policy: This section makes it clear that what is commonly referred to as the Federal beach nourishment program includes the restoration of beaches which may have been damaged by erosion or other factors. It states that Congress recognizes the need to restore eroded beaches and maintain them. The phrase "or other coastal infrastructure" is added to emphasize that, under current law, studies and projects can encompass wetlands, estuaries, and other features of the coast. In carrying out the program, Congress states its intent that preference be given to areas (1) where there has been a previous investment of Federal funds, such as the initial construction of a beach nourishment project; (2) where regional sediment management plans have been adopted to integrate coastal beach nourishment, navigation, and environmental projects; (3) where there is a need to prevent or mitigate damage to shores, beaches, and other coastal infrastructure where that damage is caused at least in part by Federal navigation projects or other Federal activities; or (4) where the project promotes human health and safety as well as the quality of life for individuals and families. This last preference recognizes that a primary purpose for establishing the Federal beach nourishment program in 1946 was the promotion of public recreation.

Federal Contribution; maximum amount; exceptions: The Federal cost-share for the construction of beach projects is shared with non-Federal interests. The amount of that cost-share is governed by provisions of the Water Resources Development Act of 1986, as amended. In general, that cost-share is 65 percent Federal/35 percent non-Federal for the initial construction of beach projects. Depending upon the year the project was authorized, the periodic renourishment cost-share is either 65/35 or 50/50. The provision changes the cost-sharing for separable costs for recreation purposes to make that costsharing consistent with the cost sharing for other beach nourishment purposes and assures that all national benefits will be considered equally in formulating and recommending a Federal project. Currently, when Federal funds are spent for recreation purposes the costsharing is 50/50. In addition, recreational benefits are considered incidental and are given less weight in identifying the Federal project than storm damage reduction and environmental restoration benefits. This paragraph changes the lower priority accorded to recreational benefits (which are also national economic development benefits) by giving equal consideration to all national project purposes without regard to budgetary policy or priority. It also establishes the cost share for beach nourishment projects whose primary net benefit is recreational at the same level of Federal cost share participation

as applies to storm damage and environmental restoration beach nourishment projects, The Secretary of the Army is required to identify the project that maximizes net benefits for all national benefit purposes and report the findings to Congress. The Secretary is also required to report the findings of studies as they pertain to all such benefits so that Congress has the prerogative to authorize the project and appropriate funds based on the Corps' report findings.

Periodic beach nourishment; "construction" defined: The provision increases the emphasis of current law that the periodic renourishment of beach projects shall be part of the ongoing construction of those projects as authorized by Congress.

Authorization of projects: In order for the Federal Government to participate in the construction of a beach nourishment project, it must be authorized by Congress. Such authorization must be preceded by studies to determine whether there is a Federal interest in participating in the project, a willing non-Federal cost share partner, and a project that meets the Corps' economic, engineering, and environmental standards. The provision requires the Secretary of the Army to report the results of all studies that have been requested by Congress to the appropriate committees of Congress and to recommend to Congress the authorization of projects that have been approved by the Chief of Engineers. Should the Chief not approve a project, the Secretary is nevertheless required to report to Congress the results of any potential project that was studied by the Corps.

Coordination of projects: The Secretary is required to coordinate all water resource projects conducted by the Corps which may affect an individual beach nourishment project, as well as to coordinate the efforts of other Federal agencies which may have an impact on a beach nourishment project. This provision is intended to ensure that projects which have an impact on each other are coordinated.

Beach nourishment projects: This provision requires the Secretary of the Army to construct any beach nourishment project for which funds have been appropriated by Congress. Prior to construction, the Secretary will enter into a written agreement with the non-Federal sponsor which states the obligations of the Federal and non-Federal interests for a term that covers the period for that project that has been authorized by Congress. The intent of this provision is to emphasize current law that the Federal Government and its non-Federal partner make binding commitments to each other, subject to the availability of funding.

Extension of the Period of Federal Participation: The provision also enables the period for Federal participation to be extended if a new study shows the project remains justified and if the extension is authorized by Congress.

Special Considerations: Construction of beach nourishment projects cannot be done when to do so would endanger a variety of species. In some instances the date of the approval for funding for a Federal fiscal year and the environmental "windows" for beach nourishment projects are in conflict with each other. For example, in years when Corps Districts do not get their allocations of funds until late January or thereafter, it may well be impossible to prepare a project for construction and to complete that construction within the environmental window. Therefore, this provision permits funds to be carried over into the following fiscal year. Current policy generally prohibits the carry over of appropriated funds from 1 year to another.

ATTACHMENT B

NATIONAL SHORELINE EROSION CONTROL DEVELOPMENT AND DEMONSTRATION PROGRAM

(a) *EXTENSION OF PROGRAM.*—Section 5(a) of the Act entitled "An Act authorizing Federal participation in the cost of protecting the shores of publicly owned property", approved August 13, 1946 (33 U.S.C. 426h(a)), is amended by striking "6 years" and inserting "10 years".

(b) *EXTENSION OF PLANNING, DESIGN, AND CONSTRUCTION PHASE.*—Section 5(b)(1)(A) of such Act (33 U.S.C. 426h(b)(1)(A)) is amended by striking "3 years" and inserting "6 years".

(c) *COST-SHARING; REMOVAL OF PROJECTS.*—Section 5(b) of such Act (33 U.S.C. 426h(b)) is amended—

(1) by redesignating paragraphs (3) and (4) as paragraphs (5) and (6), respectively; and (2) by inserting after paragraph (2) the following:

"(3) *COST SHARING.*—The Secretary may enter into a cost-sharing agreement with a non-Federal interest to carry out a project, or a phase of a project, under the erosion control program in cooperation with the non-Federal interest.

"(4) *REMOVAL OF PROJECTS.*—The Secretary may pay all or a portion of the costs of removing a project, or an element of a project, constructed under the erosion

control program if the Secretary determines during the term of the program that the project or element is detrimental to the environment, private property, or public safety.”. (d) *AUTHORIZATION OF APPROPRIATIONS*.—Section 5(e)(2) of such Act (33 U.S.C. 426h(e)(2)) is amended by striking “\$21,000,000” and inserting “\$31,000,000”.

ATTACHMENT C-1

REGIONAL SEDIMENT MANAGEMENT PROPOSAL

SEC.—. REGIONAL PROGRAMS TO CONSERVE BEACH QUALITY SAND AND SAVE TAXPAYER DOLLARS.

(a) In General.—Section 204 of the Water Resources Development Act of 1992 (33 U.S.C. 2326) is amended by striking subsections (c) through (g) and inserting the following:

“(c) *Regional Sediment Management Planning*.—In consultation and cooperation with appropriate regional, State and Federal agencies, the Secretary, acting through the Chief of Engineers, shall investigate and develop, at Federal expense, plans and demonstration projects for regional management of sediment in conjunction with the construction, operation, or maintenance of navigation, flood control, recreation, environmental protection and restoration, and hurricane and storm damage reduction projects, as well as projects for water and power infrastructure which impede the flow of sand.

“(d) *Regional Sediment Placement*.—The Secretary, acting through the Chief of Engineers, shall carry out projects to transport and place sediment obtained in connection with the construction, operation, or maintenance of an authorized navigation, flood control, recreation, environmental protection and restoration, and hurricane and storm damage reduction projects, as well as projects for water and power infrastructure which impede the flow of sand.

“(e) *Cooperative Agreement*.—Any project undertaken pursuant to subsection (d) shall be initiated only after non-Federal interests have entered into a cost-sharing agreement with the Secretary in which the non-Federal interests agree to pay up to 35 percent of the incremental costs of such project.

“(f) *Determination of Incremental Costs*.—Incremental costs associated with implementation of a project under subsection (d) shall be limited solely to the costs that are in excess of the costs necessary to dispose of sediments for construction, operation, or maintenance of the authorized navigation or flood control project under the least cost option, consistent with economic, engineering, and environmental criteria.

“(g) *Effect on Other Projects*.—The Secretary, to the greatest extent practicable, shall ensure that scheduled operations and maintenance of Federal navigation projects will not be delayed due to alternative disposal options authorized by subsection (d).

“(h) *State and Regional Plans*.—The Secretary may—

“(1) cooperate with any State in the preparation of a comprehensive State or regional coastal sediment management plan within the boundaries of the State;

“(2) encourage State participation in the implementation of the plan; and

“(3) submit to Congress reports and recommendations with respect to appropriate Federal participation in carrying out the plan.”.

“(i) *Coordination of Projects*.—In conducting studies and carrying out projects for regional sediment management, the Secretary shall—

“(1) determine whether there is any other project being carried out by the Secretary or the head of another Federal agency that may affect the regional sediment management project; and

“(2) if there is such a project, describe the efforts that will be made to coordinate the projects.

“(j) *Authorization of Appropriations*.—There is authorized to be appropriated to carry out this section \$35,000,000 annually. Such sums shall remain available until expended.

“(k) *Nonprofit Entities*.—Notwithstanding section 221 of the Flood Control Act of 1970 (42 U.S.C. 24 1962d–5b), for any project carried out under this section, a non-Federal interest may include a nonprofit entity, with the consent of the affected local government.”.

(b) Repeal.—

(1) In general.—Section 145 of the Water Resources Development Act of 1976 (33 U.S.C. 21 426j) is repealed.

(2) Hold harmless.—The repeal made by paragraph (1) shall not affect the authority of the Secretary to complete any project being carried out under such section 145 on the day before the date of enactment of this Act.

[A Section-by-Section Comparison with a Similar provision in the House passed version of WRDA is available by email ASBPA.Monitor@netlobby.com]

ATTACHMENT C-2

THE SAND CONSERVATION AND TAXPAYER SAVINGS ACT—FACT SHEET

A REGIONAL PROGRAM TO CONSERVE BEACH QUALITY SAND AND SAVE TAXPAYER DOLLARS

No initiative has received more attention within the Army Corps over the last 5 years than taking a new, holistic approach to planning and implementing water projects. Regional planning, regional sediment management, or watershed management are phrases designed to reflect an integrated approach to water resources planning. That planning approach reflects the integrated relationship of the resources themselves. The dredging of a channel, for example, inevitably has an impact on the shoreline adjacent to that channel. The Army Corps of Engineers has released a report (Watershed Perspectives for the Civil Works Program) that emphasizes coordinated planning and management of water resources. Currently, there is no statutory authority that offers sufficient congressional direction for the Corps to engage ongoing regional sediment planning and programs.

This proposal modifies Section 204 of the Water Resources Development Act. Its language takes a critical first step toward the planning and implementation of water resource projects on a regional basis. Currently, Section 204 provides authority for the beneficial use of sand for the protection, restoration, or creation of aquatic and ecologically related habitats. The language of this proposal expands that authority to include projects to place beach quality sand obtained from navigation or flood control projects on beaches or in nearshore disposal areas. The disposal areas must be selected by a local sponsor and must be for the purpose of maintaining shoreline (i.e., preventing erosion), or providing for recreation, storm damage reduction, or environmental protection and remediation. This authority is intended to be broader than the current policy limitations that apply to the justification of “shore protection” projects. Thus, for example, sufficient justification for meeting the requisite benefit-cost ratio of at least 1:1 can be derived from a project where the placement of sand provides more recreation benefits than storm damage reduction benefits.

Plans for regional sediment management under this proposal are to be developed at Federal expense. The implementation of any project developed from those plans is under a 35 percent cost-share requirement for the non-Federal sponsor. The congressional appropriations committees have funded the existing Section 204 program through the Corps’ Construction, General Account. Nothing in this language is intended to alter this funding account.

Language has been provided to assure that the initiation or implementation of a regional sediment management plan under Section 204 will not interfere with the operation or maintenance of existing Federal navigation projects. Thus, if Port A is scheduled to be dredged in fiscal year 2005 and the planning or funding for a regional project intended to be carried out in connection with the dredging project is delayed for any reason, the dredging project for Port A will not be delayed even if it means that the implementation of the regional sediment management project is put off until the next dredging of Port A.

This proposal also repeals Section 145 of the Water Resources Development Act of 1976, which provides authority for what is popularly known as the Section 933 program. Section 933 programs are a form of regional sediment management which has limitations that are not contained in this new program. The primary limitation of Section 933 programs is that they are one-time projects and not ongoing regional sediment management programs.

ATTACHMENT D

INCREASE THE SECTION 103 PROJECT/PROGRAM LIMITS

SECTION ——. SMALL SHORE AND BEACH RESTORATION AND PROTECTION PROJECTS.

Section 3 of the Act of August 13, 1946 (33 U.S.C. 426g), is amended—

- (1) by striking “\$30,000,000” and inserting “\$100,000,000”; and
- (2) by striking “\$3,000,000” and inserting “\$20,000,000”.

FACT SHEET

Section 103 of the Continuing Authorities Program was adopted by Congress under the River and Harbor Act of 1962. The purpose of this authority is to allow for the construction of small storm damage protection projects at the discretion of the Chief of Engineers, U.S. Army Corps of Engineers. Currently, the statutory Federal cost limitation per project is \$3,000,000. Unfortunately, the limit set by Congress under this authority no longer realistically reflects current cost requirements for implementation of the full array of possible small projects for beach restoration and shoreline protection. As a result, the Corps of Engineers when undertaking small shore protection studies under the Section 103 authority typically defaults to recommending hard structures to solve shoreline erosion problems as small beach fill projects with periodic renourishment typically exceeds the congressionally established \$3,000,000 Federal funding limit per project.

Over the past several years, particularly in the state of California, the legislative and regulatory climates have vigorously migrated to minimize the hardening of our shorelines. For the Corps of Engineers to be consistent with this new climate under the Section 103 program, the Chief of Engineers needs to seriously consider beach fill alternatives for small shoreline protection projects. Serious consideration of beach fill plans by the Corps of Engineers for solving shoreline erosion problems will only occur if the per project Section 103 cost ceiling is congressionally modified.

The proposed legislation raises the Section 103 statutory Federal cost limitation per project from \$3,000,000 to \$20,000,000.

The proposed legislation also modifies the Section 103 total annual program from \$30,000,000 to \$100,000,000, to account for the proposed increase of the Section 103 project cost limit.

Both increases are justifiable in terms of the need to promote sand nourishment as a tool for use in small shoreline protection projects.

ATTACHMENT E

S. 1653: NATIONAL BEACH RECREATION AND ECONOMIC BENEFITS ACT

SECTION 1. SHORT TITLE.

This Act may be cited as the “National Beach Recreation and Economic Benefits Act”.

SEC. 2. GOALS TO BE ADDRESSED IN PLANNING OF WATER RESOURCE PROJECTS.

Section 904 of the Water Resources Development Act of 1986 (33 U.S.C. 2281) is amended to read as follows:

“SEC. 904. GOALS TO BE ADDRESSED IN PLANNING OF WATER RESOURCE PROJECTS.

“(a) IN GENERAL.—Each of the goals of enhancing national economic development, the quality of the total environment, the well-being of the people of the United States, the prevention of loss of life, and the preservation of cultural and historical values shall be addressed in the formulation and evaluation of water resources projects to be carried out by the Secretary.

“(b) DISPLAY OF ASSOCIATED BENEFITS AND COSTS.—The quantifiable and unquantifiable costs and benefits associated with the goals relating to water resources projects described in subsection (a) shall be displayed in any analysis of the costs and benefits of those 14 projects.”.

SEC. 3. GIVING RECREATIONAL BENEFITS THE SAME STATUS AS OTHER BEACH RESTORATION BENEFITS.

Subsection (e)(2)(B) of the first section of the Act of August 13, 1946 (33 U.S.C. 426e(e)(2)(B)), is amended by striking clause (ii) and inserting the following:

“(ii) CONSIDERATIONS; PROCEDURES.—In making recommendations relating to shore protection projects under clause (i), the Secretary shall” (I) consider the economic and ecological benefits of the shore protection projects; and

“(II) develop and implement procedures for the determination of national economic benefits that treat benefits provided for recreation, hurricane and storm damage reduction, and environmental restoration equally.”

ATTACHMENT F

PROPOSED MODIFICATION OF SECTION 111 AUTHORITY

Section 111 of the River and Harbor Act of 1968 (82 Stat. 735, 33 U.S.C. 426i) is amended to read as follows:

“Sec. 111. The Secretary of the Army is authorized to investigate, study, plan, and implement structural and nonstructural measures for the prevention or mitigation of shore damages attributable to Federal navigation works and shore damage attributable to the AIWW and GIWW, if a non-Federal public body agrees to operate and maintain such measures, and, in the case of interests in real property acquired in conjunction with nonstructural measures, including sand nourishment and periodic renourishment, to operate and maintain the property for public purposes in accordance with regulations prescribed by the Secretary. The costs of implementing measures under this section shall be cost shared in the same proportion as the cost sharing provisions applicable to the project causing the shore damage. No such project shall be initiated without specific authorization by Congress if the Federal first cost exceeds \$5,000,000.”.

